

SHARP WAREHOUSE

SHARP ADDITION - LOT 4, BLOCK A

3275 SPRINGER ROAD

ROCKWALL, TEXAS 75032

SITE IMPROVEMENTS

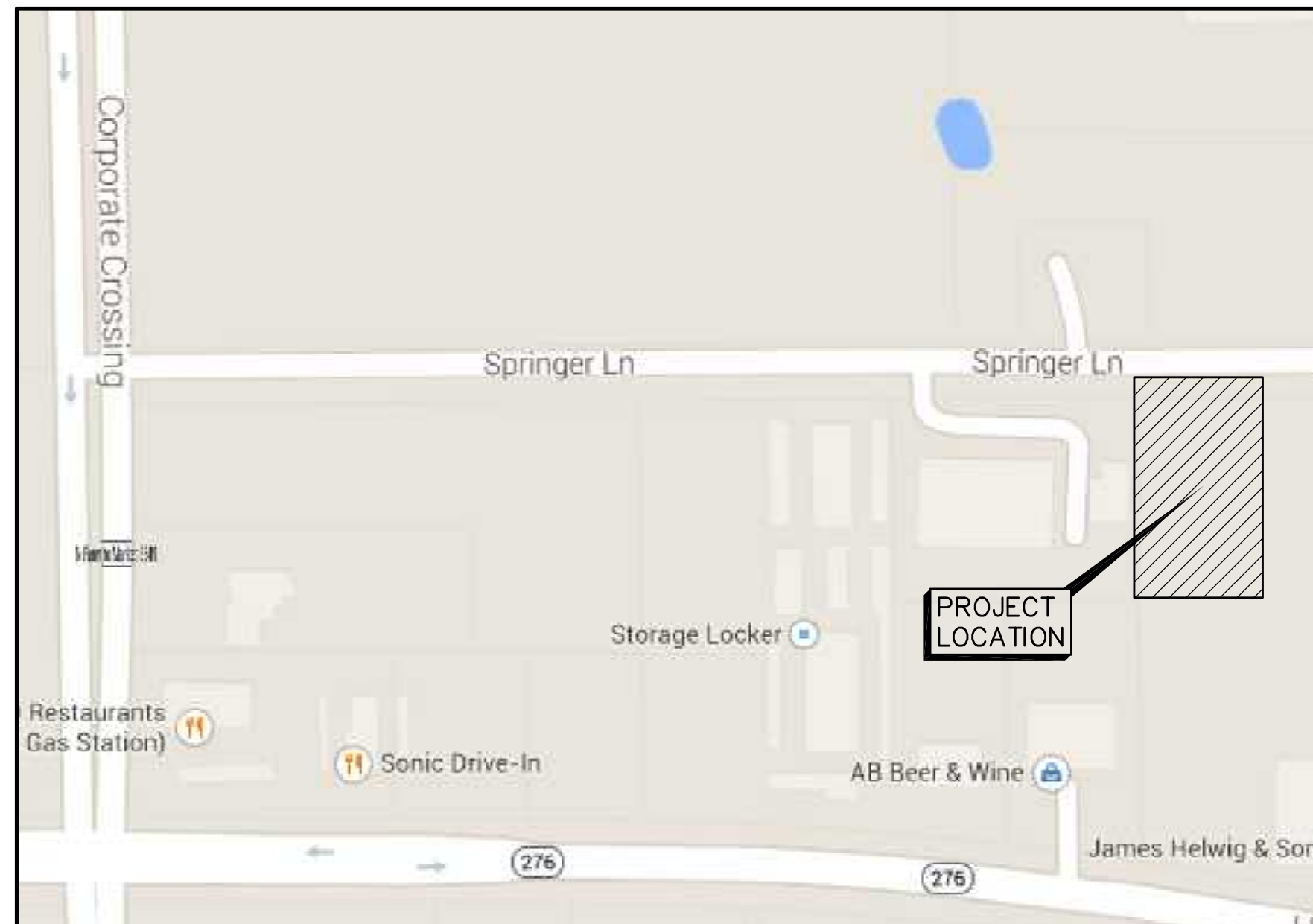
OCTOBER 2014

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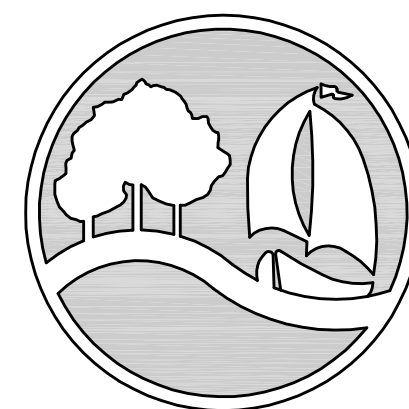
TxDOT DETAIL

- | | |
|--------------|----------------------|
| TCP (1-1)-12 | TRAFFIC CONTROL PLAN |
| PED-12A-1 | ADA RAMP |
| PED-12A-2 | ADA RAMP |



VICINITY MAP
N.T.S.

DALLAS MAPSCO 20D-Z



City of Rockwall
The New Horizon

PREPARED BY :

LAM CONSULTING ENGINEERING
6804 WILHELMINA DRIVE
SACHSE, TEXAS 75048
(214) 766-1011
www.lamcivil.com
Firm# F-9763

NOTE:
CITY OF ROCKWALL ENGINEERING DEPARTMENT LATEST STANDARD DETAILS AND NCTCOG 3RD EDITION SHALL BE USED FOR CONSTRUCTION OF THIS PROJECT UNLESS OTHERWISE NOTED WITHIN THESE PLANS. THE CONTRACTOR SHALL OBTAIN THE STANDARD DETAIL BOOK FROM THE CITY'S ENGINEERING DEPARTMENT.

SHARP INSULATION CO.
959 W. RALPH HALL PARKWAY
ROCKWALL, TEXAS 75032
(972) 772-7411

AS-BUILT PLANS

TO THE BEST OF OUR KNOWLEDGE LAM CONSULTING ENGINEERING, HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON THE OWNER SURVEYOR SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.
8/17/16

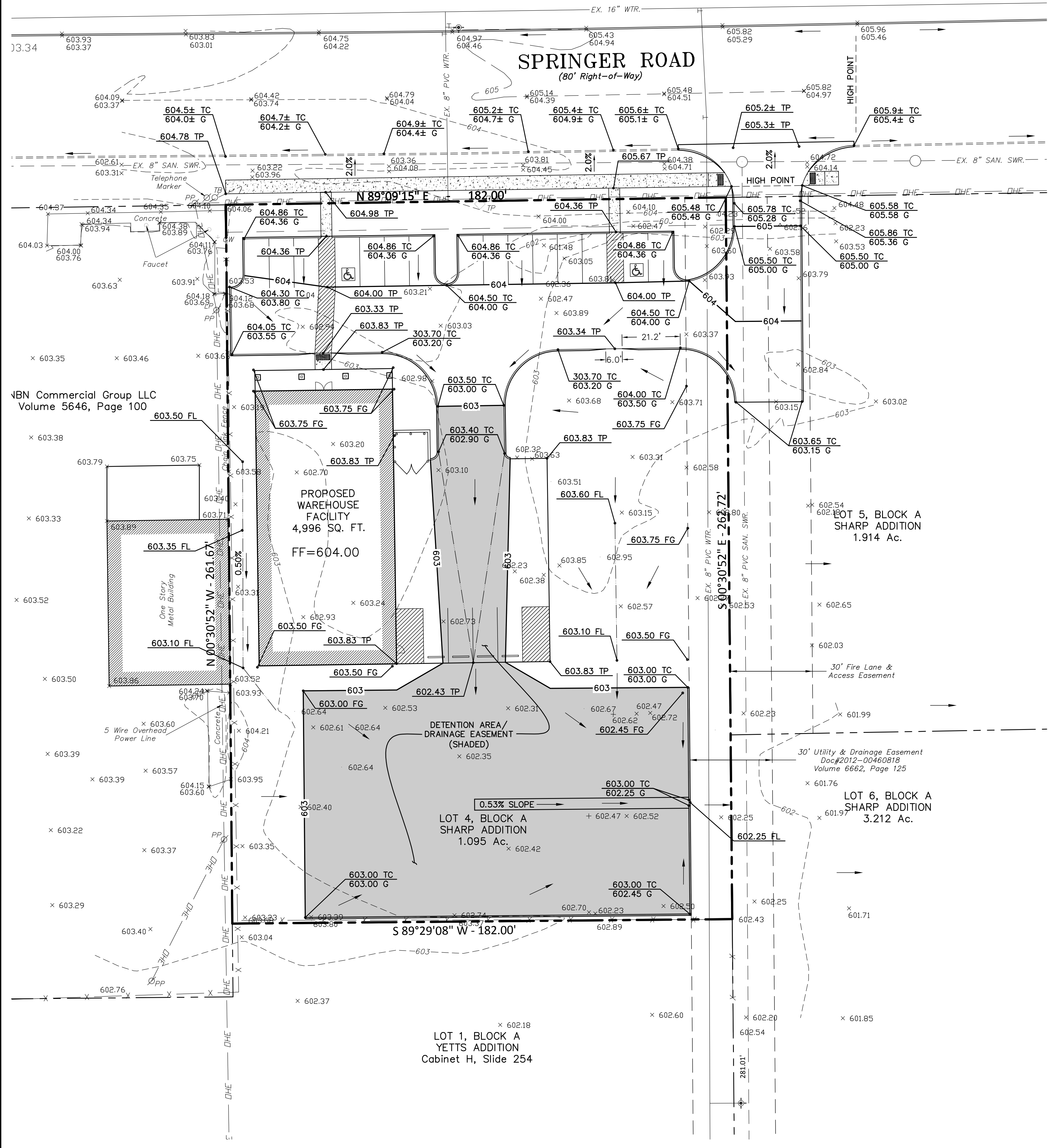
ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TUAN P. LAM, P.E. 86968 ON 10/15/14. ALTERATION OF A SEALED DOCUMENT WITHOUT THE PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

SURVEY INFORMATION ON THIS DRAWING WAS PROVIDED BY OTHERS. LAM CONSULTING ENGINEERING IS NOT RESPONSIBLE FOR THE ACCURACY OF THE TOPOGRAPHIC MAPPING NOR BENCHMARK DATUM.

THE INFORMATION SHOWN ON THIS PLAN ARE FROM RECORD DRAWINGS. THE ENGINEER IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION SHOWN ON THIS DRAWING. CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES AND CONTACT ALL UTILITY COMPANIES 48 HRS PRIOR TO ANY EXCAVATION. 1-800-DIG TESS



GRADING NOTES:
 1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE CITY'S PLANS AND SPECIFICATIONS, EXCEPT AS NOTED HEREIN AND APPROVED BY THE CITY AND NCTCOG 3RD EDITION.

2. THE LOCATION OF ALL UTILITIES LOCATED ON THESE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.

3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. ALL MANHOLES, CLEAN-OUTS, VALVE BOXES, FIRE HYDRANTS, ETC. MUST BE ADJUSTED TO PROPER LINE AND GRADE BY THE CONTRACTOR PRIOR TO AND AFTER THE PLACING OF PERMANENT PAVING. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING CONSTRUCTION OF THE PAVING FOR THIS DEVELOPMENT.

4. DRAINAGE SHOULD BE MAINTAINED AWAY FROM THE FOUNDATIONS, BOTH DURING AND AFTER CONSTRUCTION.

6. GEOTECH REPORT TO BE PROVIDED BY OTHERS. ALL RECOMMENDATIONS CONTAINED WITHIN GEOTECHNICAL REPORT SHALL BE FOLLOWED IN THE CONSTRUCTION OF THIS PROJECT. ALL EARTHWORK OPERATIONS SHALL CONFORM TO THE RECOMMENDATIONS PER THE GEOTECHNICAL REPORT.

7. THE SUBGRADE IN AREAS TO BE FILLED SHOULD BE STRIPPED OF VEGETATION AND ANY MAJOR ROOT SYSTEMS. IT SHOULD THEN BE PROOFROLLED WITH HEAVY PNEUMATIC EQUIPMENT. ANY SOFT PUMPING AREAS SHOULD BE UNDERCUT AND PROPERLY BACKFILLED. THE SUBGRADE SHOULD THEN BE SCARIFIED TO A MINIMUM +2 PERCENTAGE POINTS ABOVE THE SOIL'S OPTIMUM MOISTURE DETERMINED BY THAT TEST.

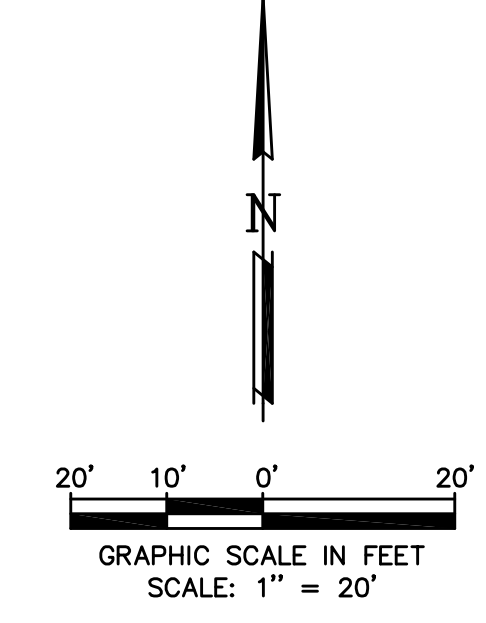
8. ALL BACKFILL SHALL BE COMPACTED TO 95% PROCTOR DENSITY. BACKFILL SHOULD BE STRIPPED OF VEGETATION AND ANY MAJOR ROOT SYSTEMS. IT SHOULD THEN BE PROOFROLLED WITH HEAVY PNEUMATIC EQUIPMENT. ANY SOFT PUMPING AREAS SHOULD BE UNDERCUT AND PROPERLY BACKFILLED. THE BACKFILL SHOULD THEN BE SCARIFIED TO A MINIMUM +2 PERCENTAGE POINTS ABOVE THE SOIL'S OPTIMUM MOISTURE DETERMINED BY THAT TEST. THE FILL MATERIALS SHOULD THEN BE SPREAD IN LOOSE LIFTS, LESS THAN 8 INCHES THICK, AND UNIFORMLY COMPACTED TO THE SAME CRITERIA. IF FILLING IS SUSPENDED AND THE SUBGRADE BECOMES DESICCATED OR RUTTED, IT SHOULD BE REWORKED PRIOR TO PLACEMENT OF A SUBSEQUENT LIFT. ALL FILL TO BE COMPACTED USING A SHEEP FOOT ROLLER.

9. COMPACTION TEST SHALL BE DONE FOR EACH 8" OF FILL, BUT NOT LESS THAN ONE TEST FOR EVERY CUBIC YARDS, OR MORE FREQUENTLY IF REQUIRED BY THE SOILS ENGINEER.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL COSTS INCURRED FOR THE INSPECTION AND TESTING OF SOILS DUE TO FAILURE TO COMPLY WITH THE MINIMUM REQUIREMENTS OF THE SOILS REPORT.

11. ALL PROPOSED SPOT SHOTS ARE TOP OF PAVEMENT ELEVATIONS UNLESS OTHERWISE SPECIFIED.

12. ALL DISTURBED AREAS SHALL BE STABILIZED WITH BROADCAST SEED AND FERTILIZER UPON COMPLETION OF GRADING AND PAVING. CONTRACTOR SHALL PROVIDE WATER AS NECESSARY TO ESTABLISH PERMANENT VEGETATION. 75%-80% OF ALL DISTURBED AREA TO HAVE 1" TALL ESTABLISHED GRASS PRIOR TO ENGINEERING ACCEPTANCE. ALL RIGHT-OF-WAYS TO BE SODDED.



- LEGEND**
- 450.00 TP TOP OF PAVING ELEVATION
 - 450.00 FG/BW FINISHED GRADE/ BOTTOM OF WALL
 - 450.00 TC/TW TOP OF CURB/ TOP OF WALL ELEVATION
 - 450.00 TC TOP OF CURB ELEVATION
 - 450.00 G GUTTER ELEVATION
 - 485- EXISTING CONTOUR
 - 485- PROPOSED CONTOUR
 - RIDGE — PROPOSED GRADE HIGH POINT
 - PROPOSED FLOW ARROW
 - - - PROPOSED VALLEY GUTTER
- LOT AREA = 47,698 Sq. Ft.
 DISTURBED AREA = 45,313 Sq. Ft.

BENCHMARK:
 Standard City of Rockwall Monument Station No. R019 is a brass disc set at the northwest corner of Silver View and Diamond Way. Posted Elevation = 600.69

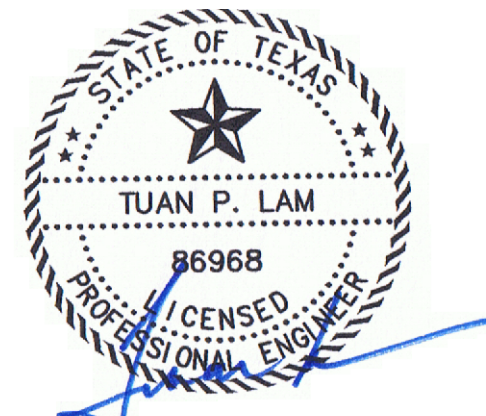
AS-BUILT PLANS
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CONTRACTOR SHALL PAY ALL PERMIT FEES AND WILL SETUP PRE-CONSTRUCTION MEETING PRIOR TO COMMENCING ANY WORK.

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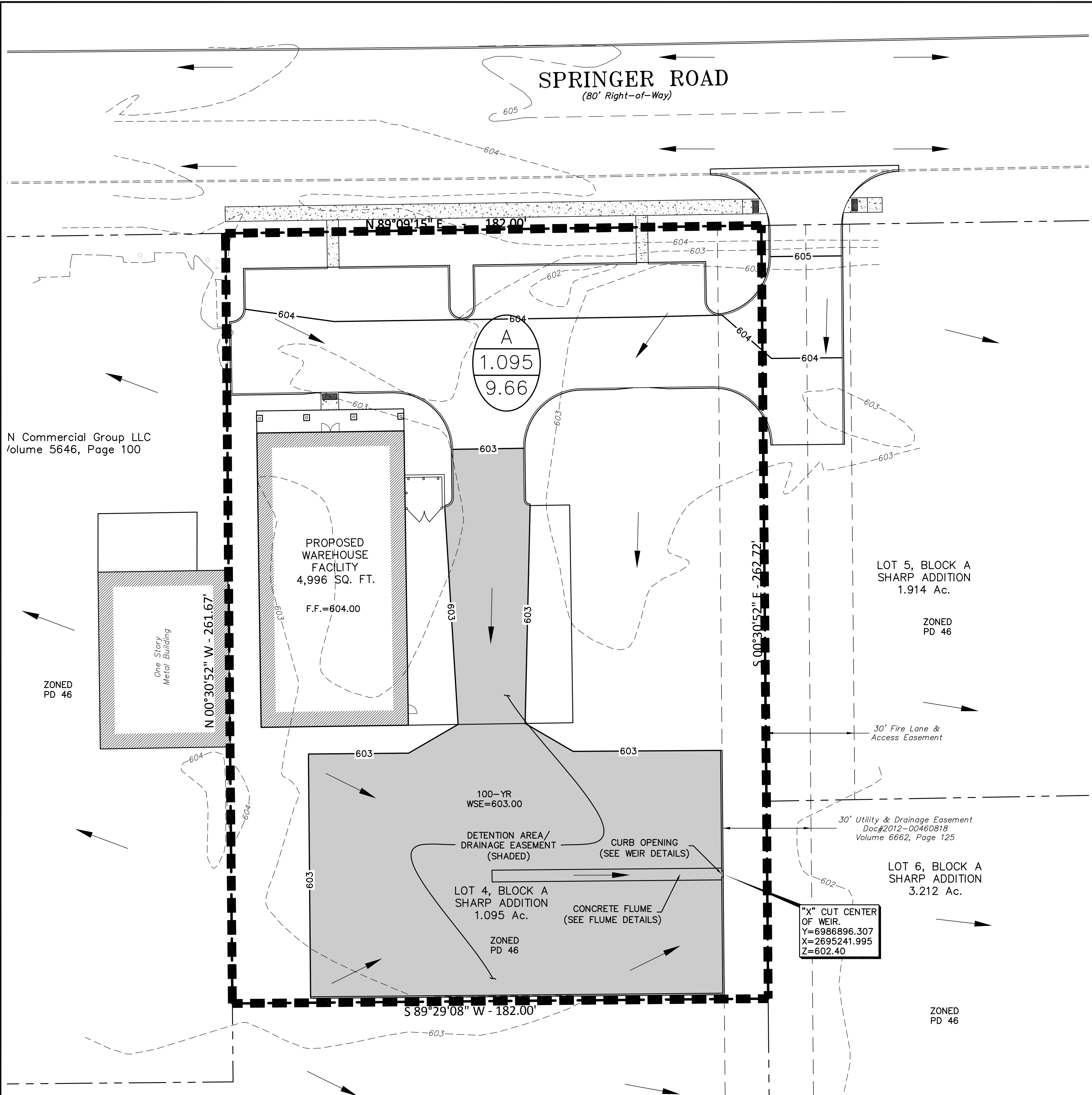


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GRADING PLAN
 SHARP ADDITION, LOT 4, BLOCK A
 SHARP WAREHOUSE
 3255 SPRINGER ROAD
 ROCKWALL, TEXAS 75032

LAM CONSULTING ENGINEERING
 6804 WILHELMINA DRIVE
 SACHSE, TEXAS 75048
 Phone (214) 766-1011
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 Firm #F-9763

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|-------------|----------------------|------------------|--------|
| DESIGN: LCE | CHECK: LCE | SCALE: AS NOTED | 3 of 7 |
| DRAWN: CTL | DATE: SEPTEMBER 2014 | PROJECT: 0500-14 | |



N Commercial Group LLC
Volume 5646, Page 100

ZONED PD 46

LOT 5, BLOCK A SHARP ADDITION
1.914 Ac.
ZONED PD 46

LOT 6, BLOCK A SHARP ADDITION
3.212 Ac.
ZONED PD 46

LOT 1, BLOCK A YETTS ADDITION
Cabinet H, Slide 254
ZONED PD 46

DRAINAGE CALCULATION – PRE-DEVELOPED

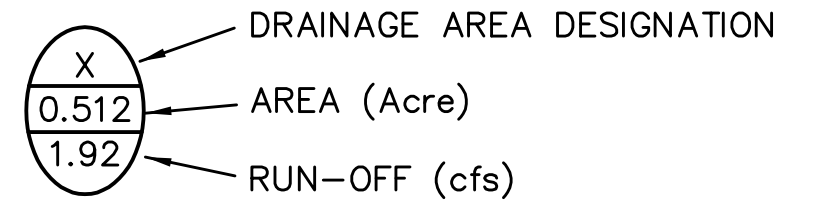
| DRAINAGE AREA | ACRES | TIME (MIN.) | RUN-OFF COEF. (C) | INTENSITY (100-YR) | Q100 (cfs) |
|---------------|-------|-------------|-------------------|--------------------|------------|
| A | 1.095 | 10 | 0.50 | 9.80 | 5.36 |

DRAINAGE CALCULATION – POST DEVELOPED

| DRAINAGE AREA | ACRES | TIME (MIN.) | RUN-OFF COEF. (C) | INTENSITY (100-YR) | Q100 (cfs) |
|---------------|-------|-------------|-------------------|--------------------|------------|
| A | 1.095 | 10 | 0.90 | 9.80 | 9.66 |

DETENTION PROVIDED

PARKING LOT:
DETENTION AREA = 15,288 S.F.
AVG. DEPTH = 0.40'
DETENTION STORAGE VOL. = 15,288x0.40 = 6,115 C.F.
THUS 6,115 C.F. > 5,801 C.F.



Q=3.367*b*h^1.4866
Side slope 1:4 (horz:vert)
TRAPEZOIDAL WEIR - ACTUAL

| YEAR | h (Ft.) | b (Ft.) | Q |
|------|---------|---------|------|
| 100 | 0.72 | 2 | 5.41 |
| 25 | 0.63 | 2 | 4.95 |
| 10 | 0.44 | 2 | 3.90 |
| 5 | 0.35 | 2 | 3.35 |

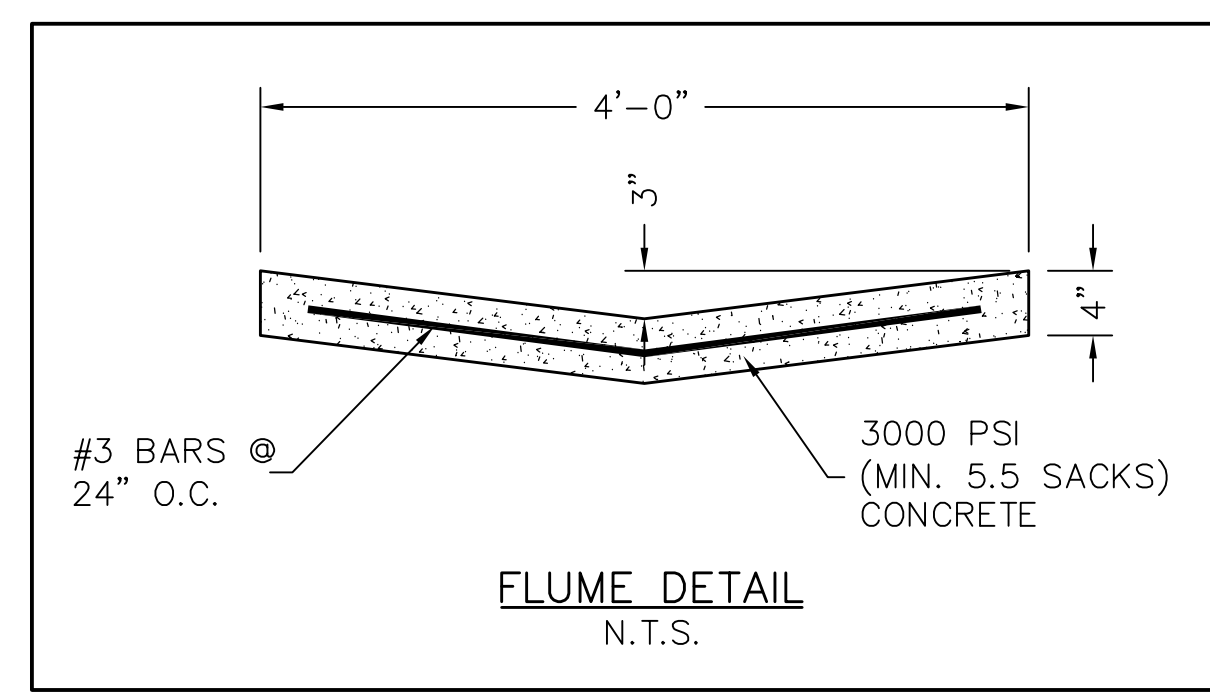
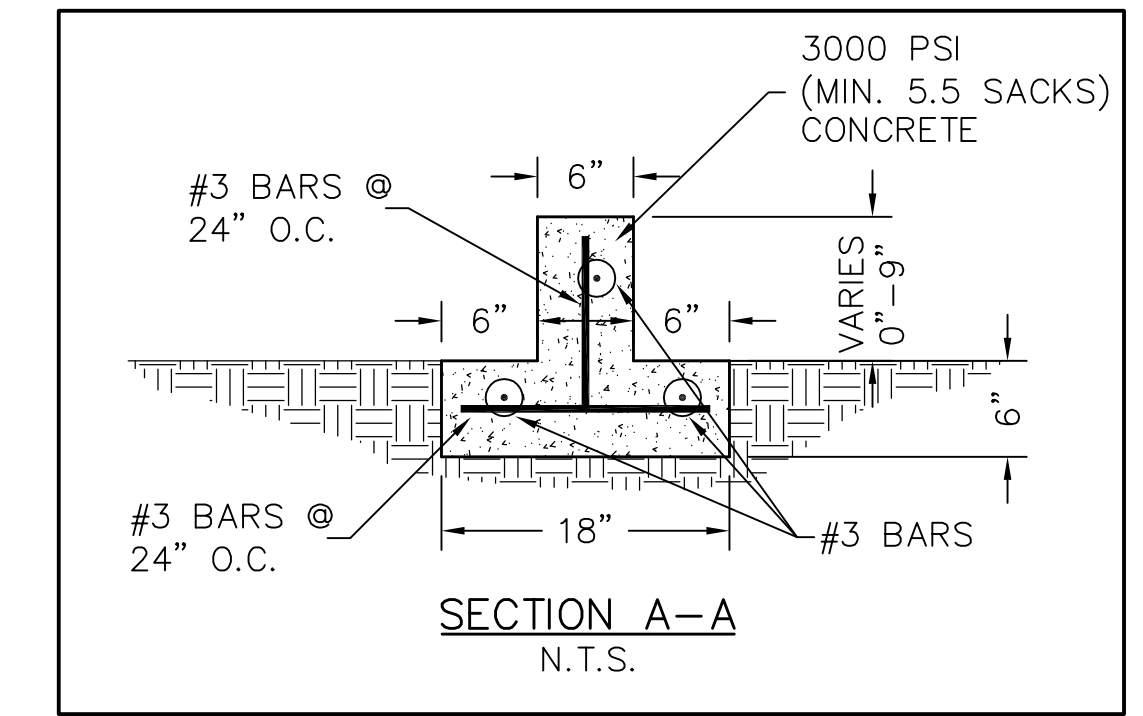
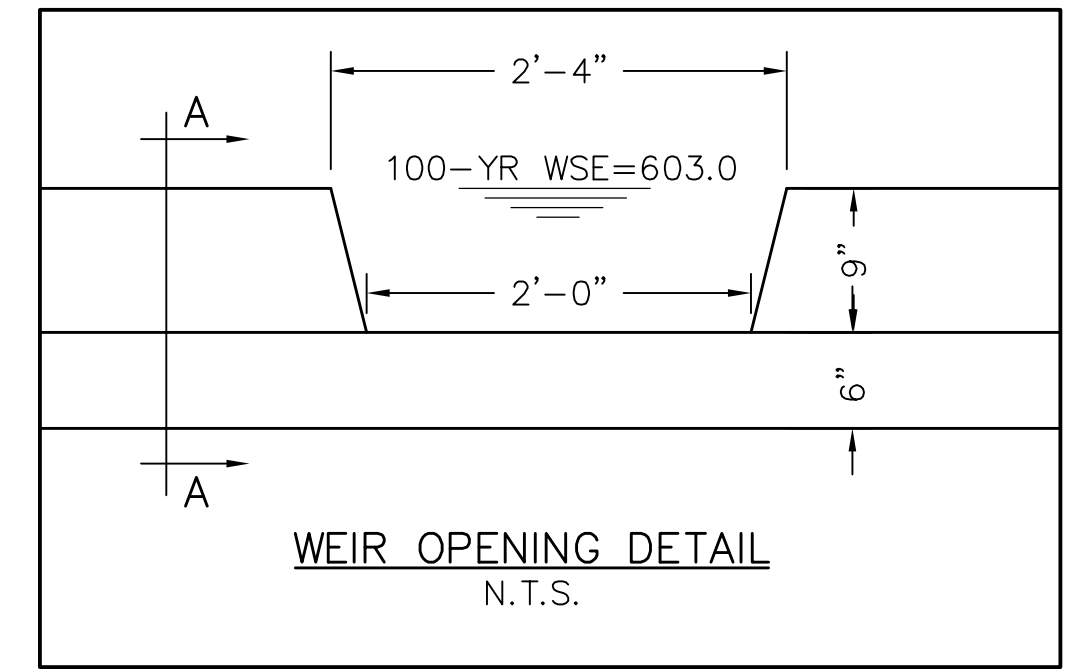
AREA "A" RUN-OFF CALCULATIONS - ALLOWED

| YEAR | TIME | C | I | AREA (Ac.) | Q (cfs) |
|------|------|------|------|------------|---------|
| 100 | 10 | 0.50 | 9.80 | 1.095 | 5.37 |
| 25 | 10 | 0.50 | 9.00 | 1.095 | 4.93 |
| 10 | 10 | 0.50 | 7.10 | 1.095 | 3.89 |
| 5 | 10 | 0.50 | 6.10 | 1.095 | 3.34 |

DETENTION CALCULATION:

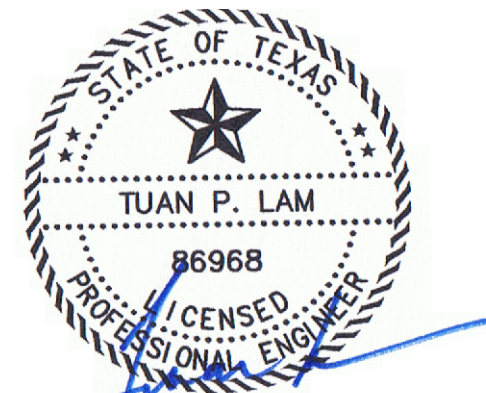
Based on 100-yr storm requirements

| Q (cfs) | Time | I | Q(cfs) | Vol (cf) Req. |
|---------|------|------|--------|---------------|
| 5.37 | 15 | 9.00 | 8.87 | 3958 |
| 0.50 | 20 | 8.30 | 8.18 | 4987 |
| 9.80 | 30 | 6.90 | 6.80 | 5801 |
| 1.095 | 40 | 5.80 | 5.72 | 5670 |
| 10 | 50 | 5.00 | 4.93 | 5125 |
| | 60 | 4.50 | 4.43 | 4698 |
| | 70 | 4.00 | 3.94 | 3679 |
| | 80 | 3.70 | 3.65 | 3016 |
| | 90 | 3.50 | 3.45 | 2529 |



AS-BUILT PLANS

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DETENTION TO BE COMPLETELY INSTALLED AND FUNCTIONAL PRIOR TO ANY PAVING/CONCRETE BEING INSTALLED. BOTTOM AND SIDES ON DETENTION POND TO EITHER HAVE SOD OR ANCHORED CURLEX PRIOR TO ANY PAVING/CONCRETE INSTALLATION.

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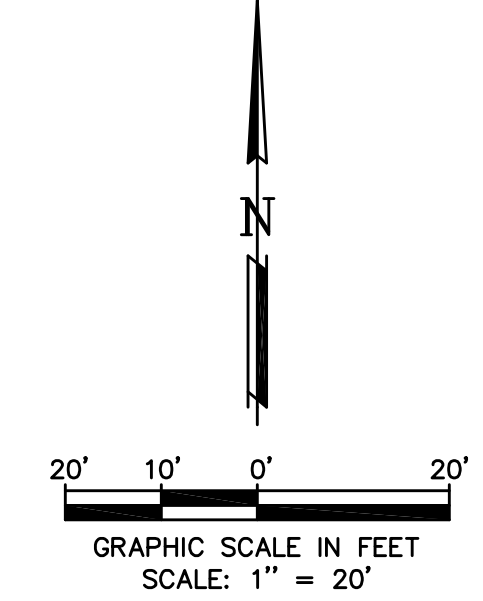
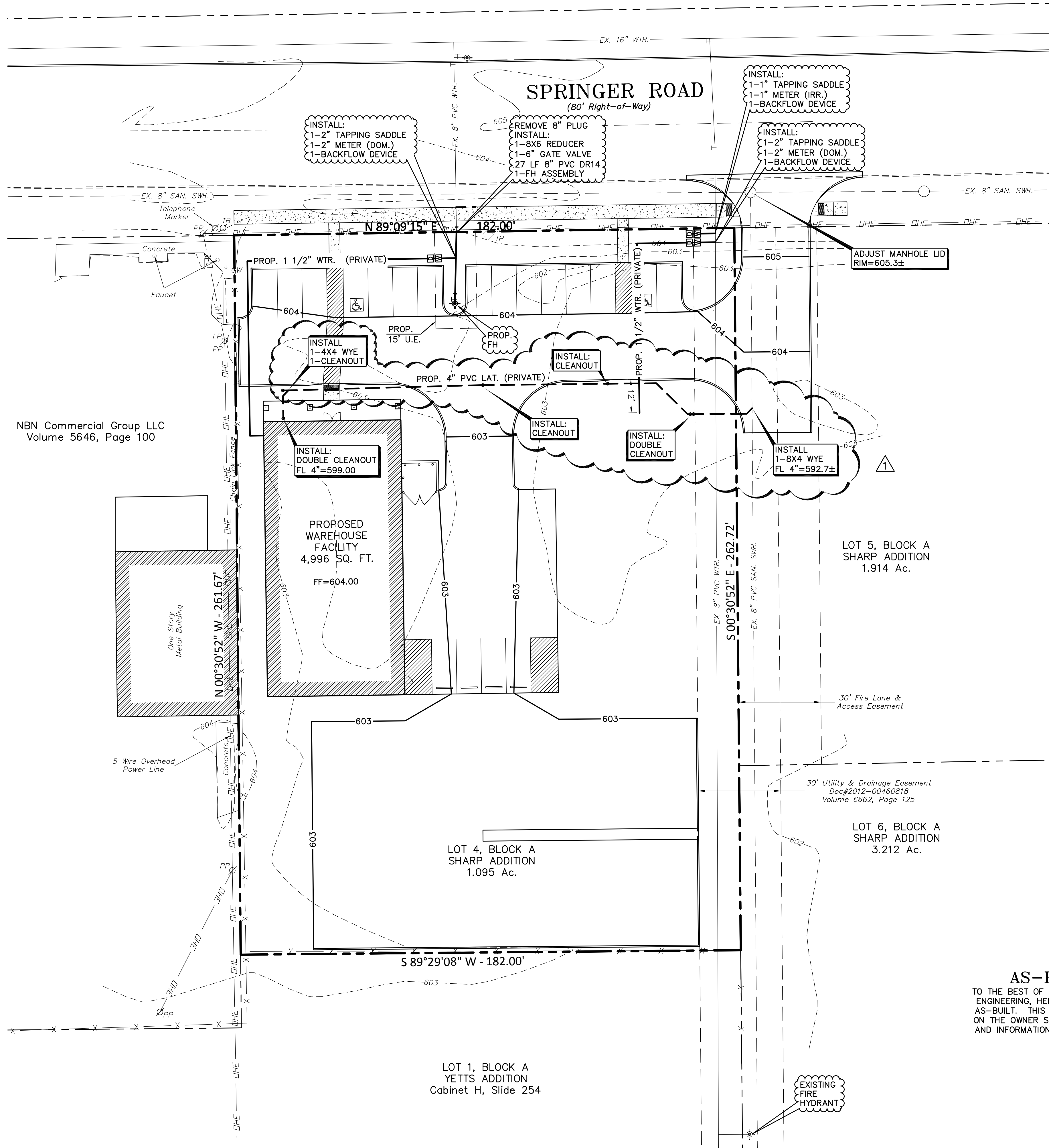
DRAINAGE AREA MAP
SHARP ADDITION, LOT 4, BLOCK A
SHARP WAREHOUSE
3255 SPRINGER ROAD
ROCKWALL, TEXAS 75032

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| DESIGN: LCE | CHECK: LCE | SCALE: AS NOTED |
| DRAWN: CTL | DATE: SEPTEMBER 2014 | PROJECT: 0500-14 |

4 of 7

BENCK MARK:
Standard City of Rockwall Monument Station No. R019 is a brass disc set at the northwest corner of Silver View and Diamond Way. Posted Elevation = 600.69



- WATER & SANITARY SEWER NOTES:**
1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE CITY'S STANDARDS AND SPECIFICATIONS.
 2. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH CITY STANDARDS, TEXAS STATE LAW, AND O.S.H.A. STANDARDS FOR ALL EXCAVATION IN EXCESS OF FIVE FEET IN DEPTH.
 3. THE LOCATION OF ALL UTILITIES LOCATED ON THESE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.
 4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL PUBLIC INFRASTRUCTURE IN THE CONSTRUCTION OF THIS PROJECT.
 5. ANY UTILITY INSTALLED OUTSIDE OF AN EASEMENT SHALL BE INSTALLED BY A PLUMBER AND INSPECTED BY BUILDING DEPT.
 6. BACKFILL FOR UTILITY LINES SHOULD BE CAREFULLY PLACED SO THAT THE UTILITY WILL BE STABLE. WHERE UTILITY LINES CROSS THE PARKING LOT, THE TOP 6" SHOULD BE COMPACTED SIMILARLY TO THE REMAINDER OF THE LOT. UTILITY DITCHES SHOULD BE VISUALLY INSPECTED DURING THE EXCAVATION PROCESS TO ENSURE THAT UNDESIRABLE FILL IS NOT USED.
 7. IF ROCK IS ENCOUNTERED IN THE TRENCH, ROCK SPOIL SHALL NOT BE USED IN THE UPPER 1.5 FEET OF THE TRENCH. THE UPPER 1.5 FEET OF THE TRENCH IS TO BE BACKFILLED ONLY WITH QUALITY TOPSOIL.
 8. ALL WATER MAINS SHALL MEET AWWA C-900, PVC DR-14 CLASS 200. ALL FITTINGS SHALL MEET ASTM F477 SPECIFICATIONS.
 9. ALL DUCTILE IRON FITTINGS SHALL BE OF THE MECHANICAL JOINT TYPE OR SLIP JOINT AND SHALL BE CLASS D, OR CLASS 250 ON SIZES 12" AND SMALLER IN ACCORDANCE WITH A.W.W.A. SPECIFICATION C-110-64 AND C-111-64.
 10. EMBEDMENT FOR PVC WATER MAIN SHALL COMPLY WITH THE CITY DETAILS AND SPECIFICATIONS.
 11. ALL WATER METERS TO BE PLACED IN A NON-TRAFFIC AREA.
 12. ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 42", OR SUFFICIENT COVER TO CLEAR OTHER UTILITIES AS MEASURED FROM TOP OF PIPE TO EXISTING GROUND LEVEL OR FINISHED GRADE, WHICHEVER IS GREATER.
 13. ALL WATER AND SANITARY SEWER MAINS AND SERVICES SHALL HAVE A 10' MIN. LATERAL SEPARATION DISTANCE.
 14. ALL SANITARY SEWER PIPES AND FITTINGS SHALL MEET ASTM D 3034, PVC SEWER PIPE SDR35. PIPE OVER 10' IN DEPTH, USE ASTM D 2241, PVC PIPE, SDR 26 (160).
 15. ALL WATER AND SANITARY SEWER TESTINGS SHALL BE ACCOMPLISHED BY A TESTING LAB APPROVED BY THE CITY AND PAID BY CONTRACTOR.
 16. REFER TO MECHANICAL PLANS FOR EXACT WATER AND SEWER SERVICE LOCATIONS.

▲ SANITARY SEWER LATERAL FIELD CHANGES - AS-BUILT.

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ALL SANITARY SEWER WORK DESIGNATED AS "PRIVATE" IN THIS SET OF PLANS SHALL BE INSTALLED IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE, PERMITTED AND INSPECTED BY THE CITY BUILDING INSPECTION DEPARTMENT AND INSTALLED BY A LICENSED PLUMBER.

A SEPARATE PERMIT FROM THE FIRE DEPARTMENT IS NEEDED FOR THE FIRE SPRINKLER LINE. FIRE LINE MUST BE A MINIMUM OF 10-FOOT SEPARATION DISTANCE FROM ALL OTHER UTILITIES.

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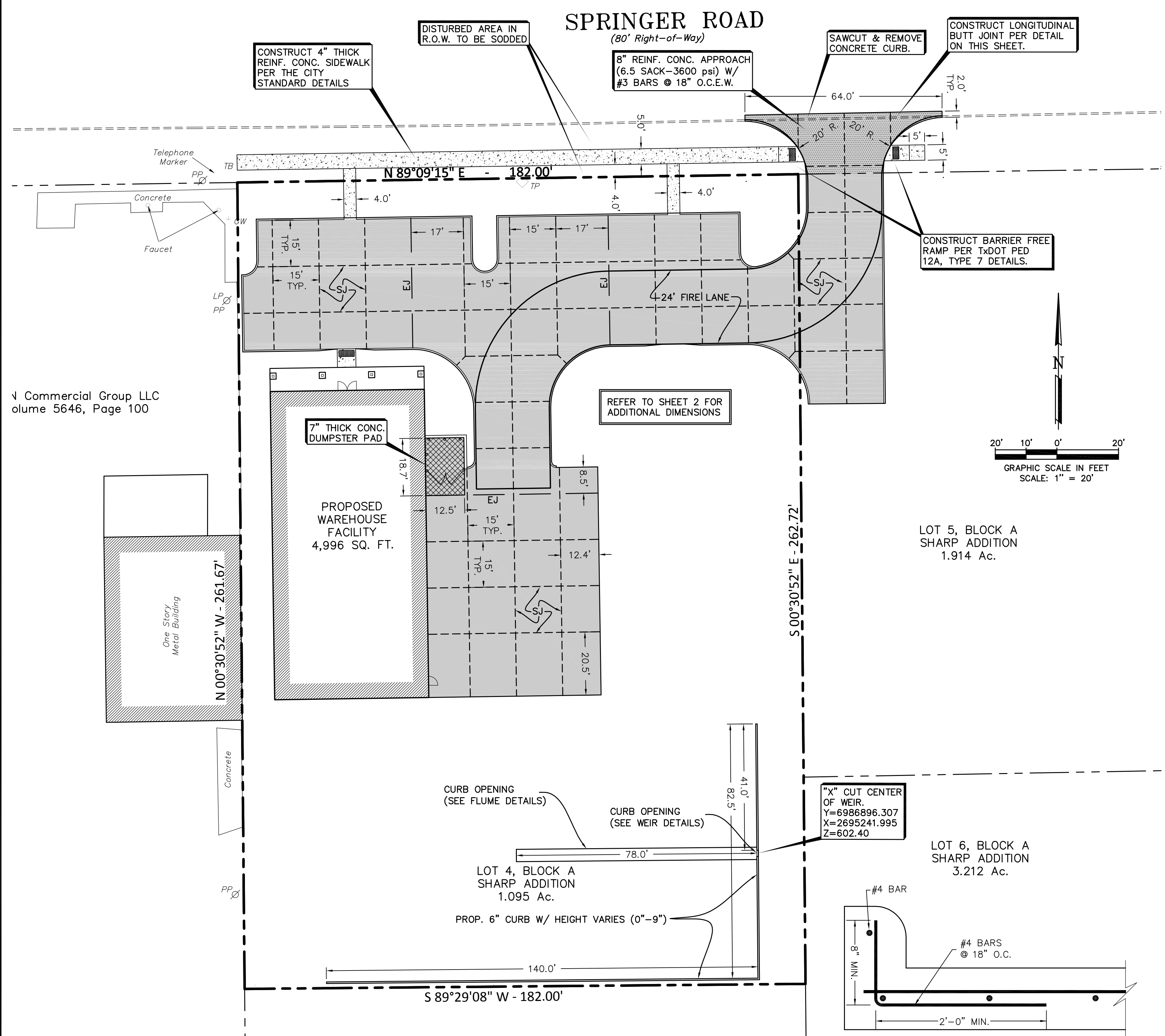
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UTILITY PLAN

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SHARP WAREHOUSE
3255 SPRINGER ROAD
ROCKWALL, TEXAS 75032

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| DESIGN: LCE | CHECK: LCE | SCALE: AS NOTED | 5 of 7 |
| DRAWN: CTL | DATE: SEPTEMBER 2014 | PROJECT: 0500-14 | |



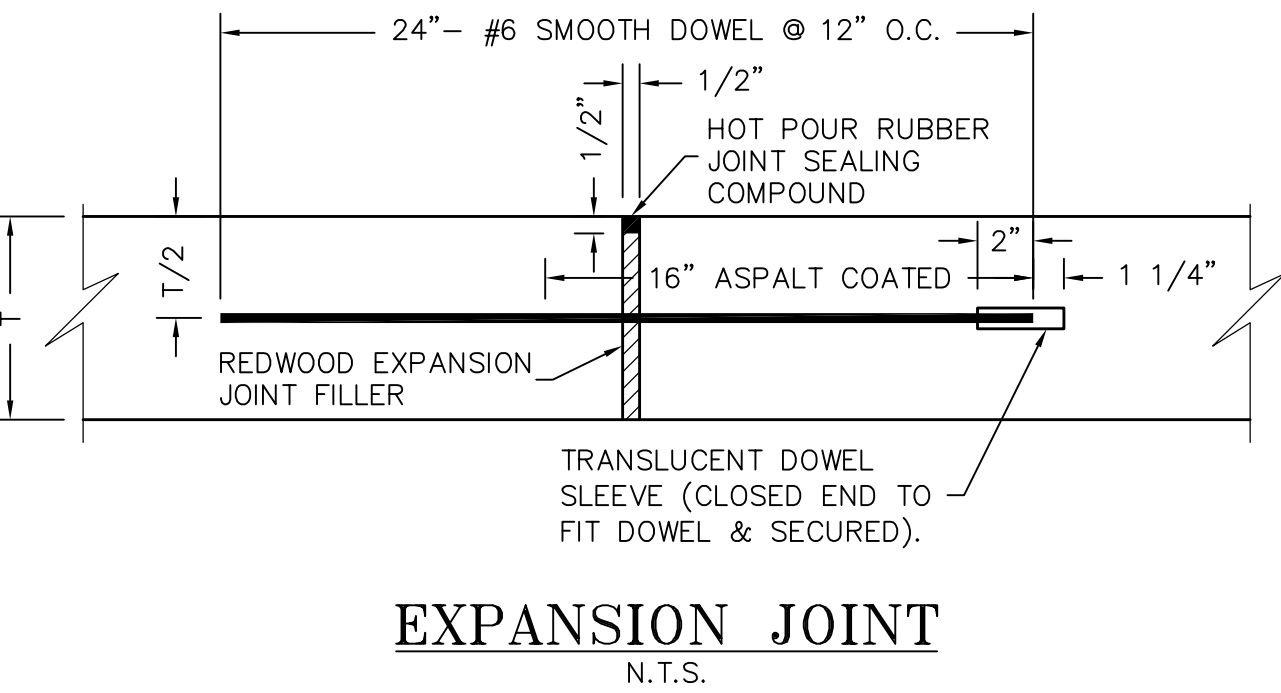
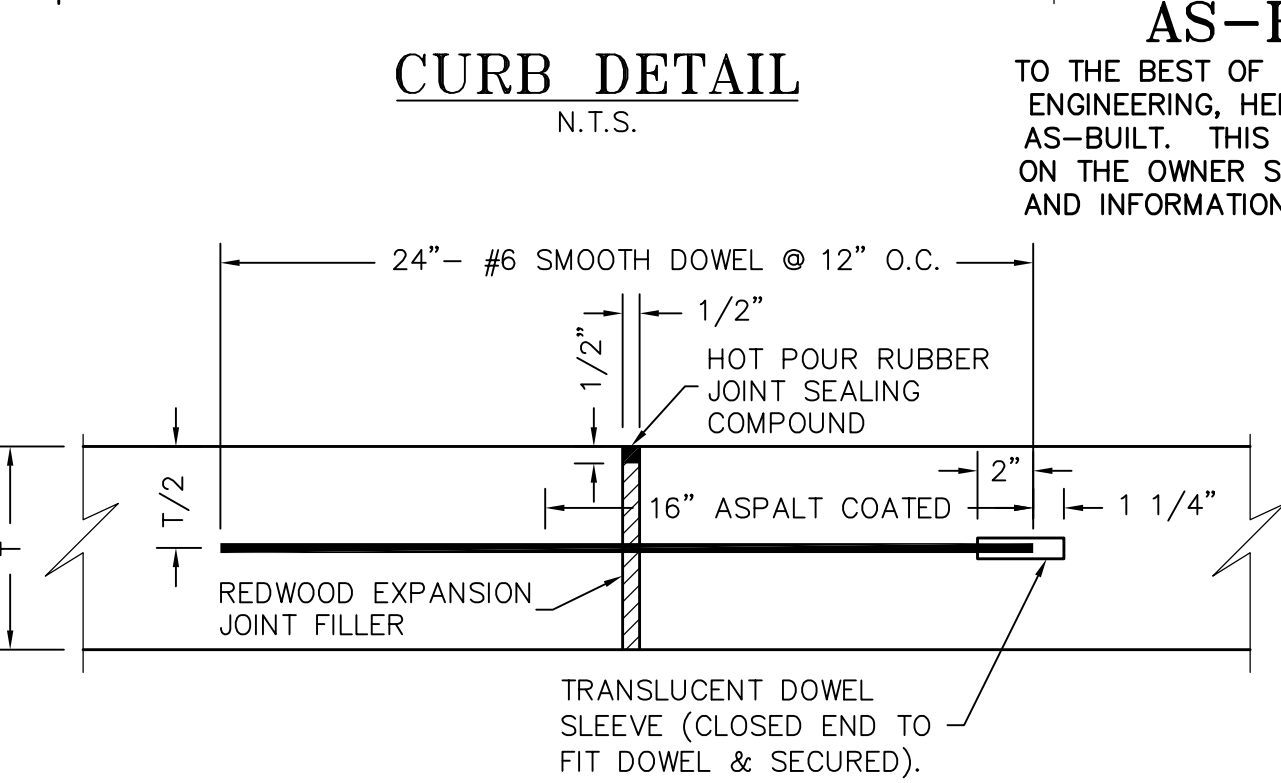
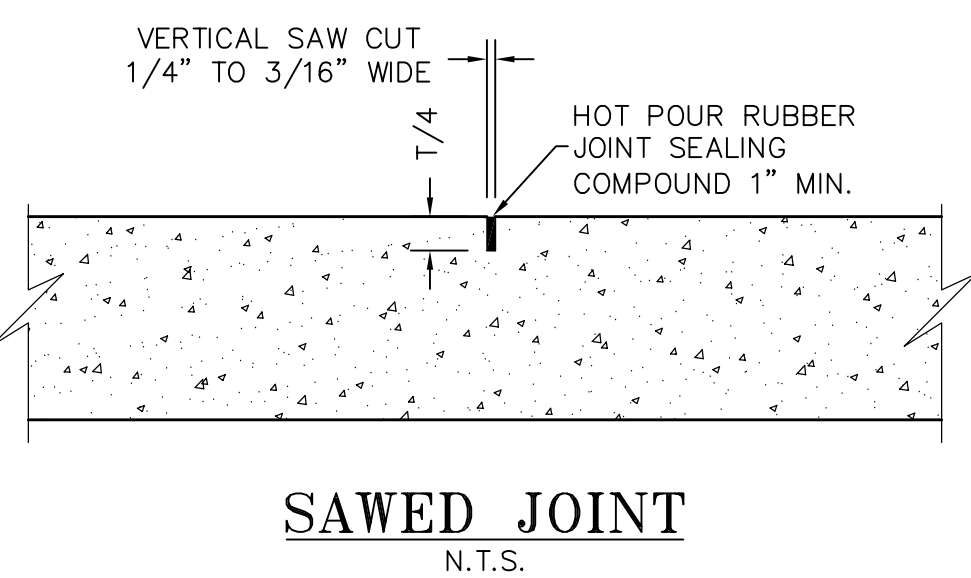
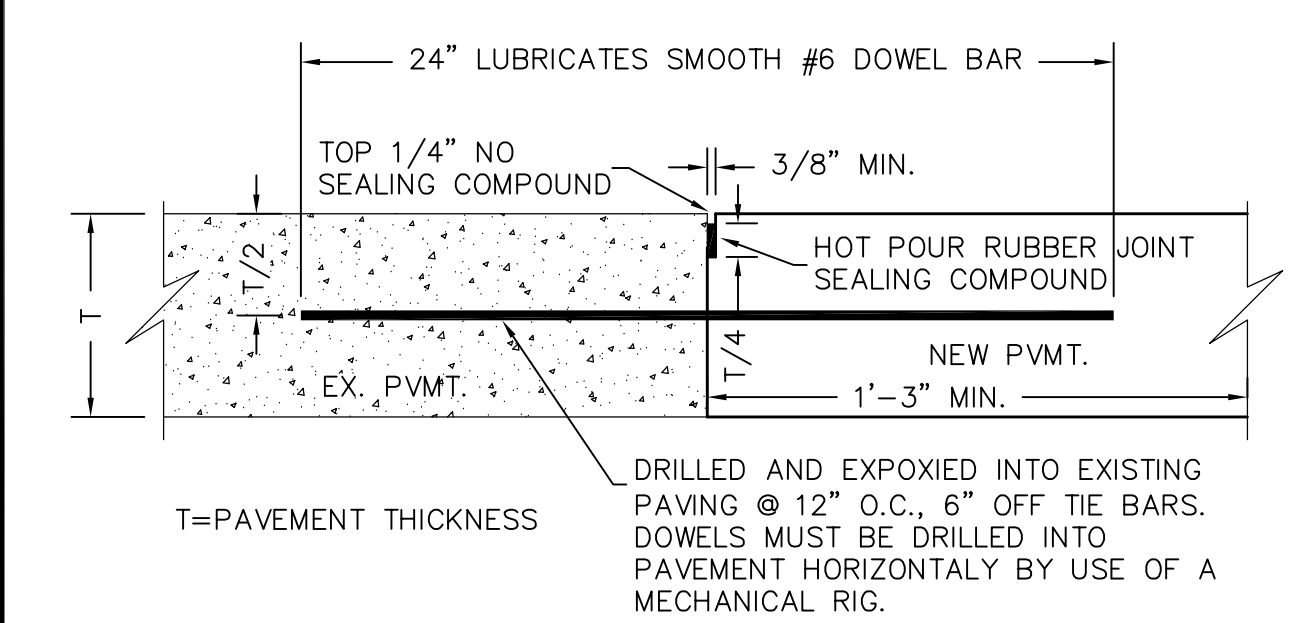
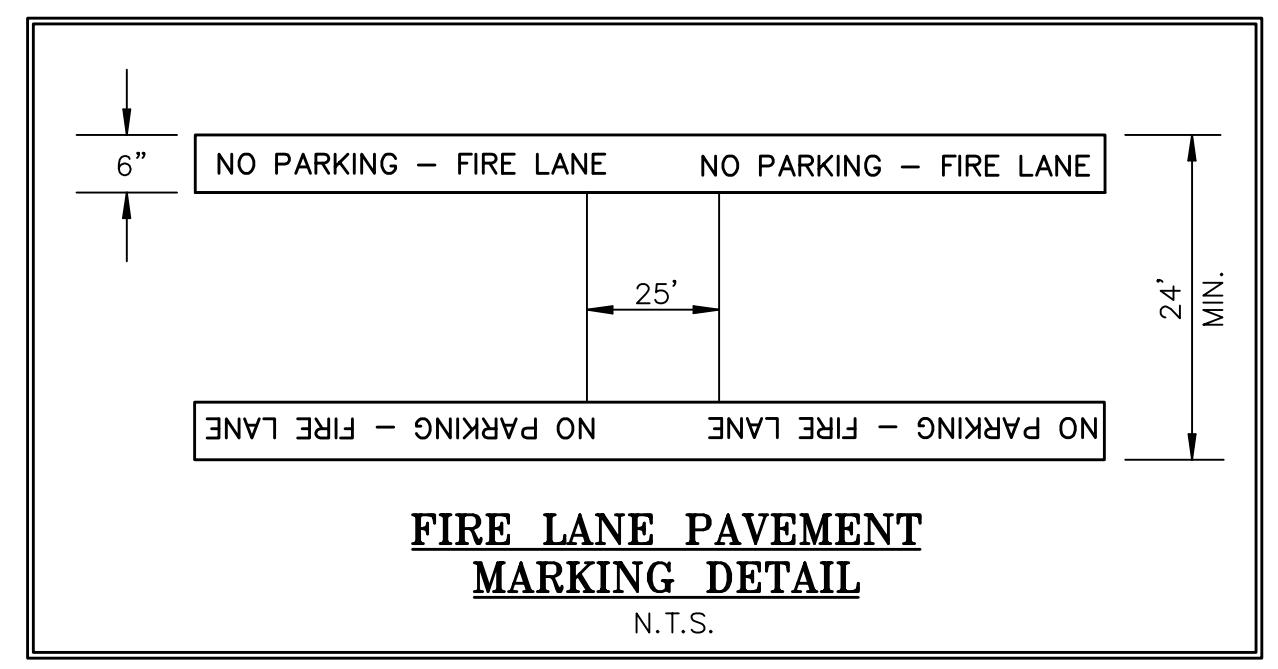
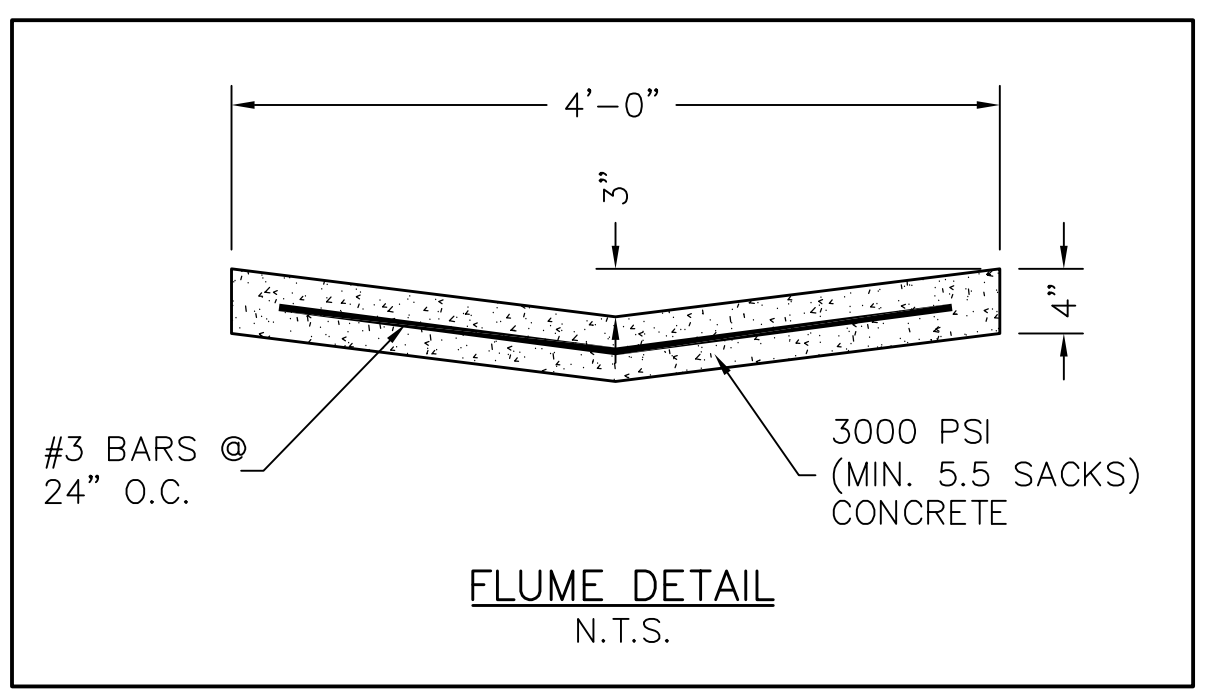
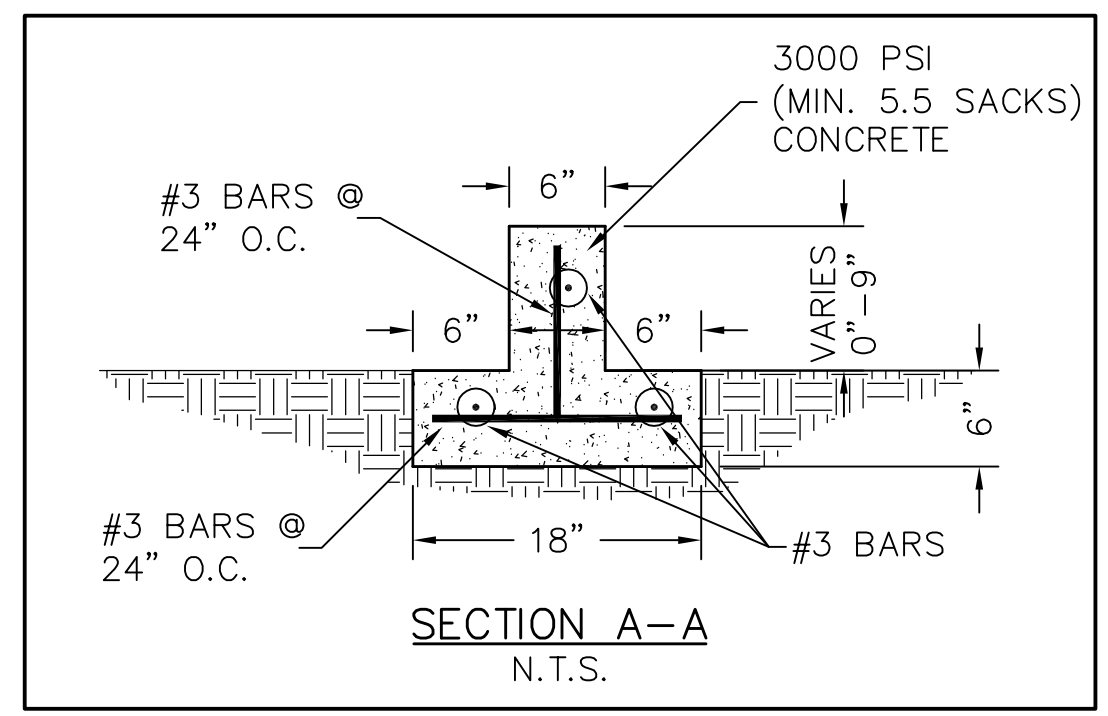
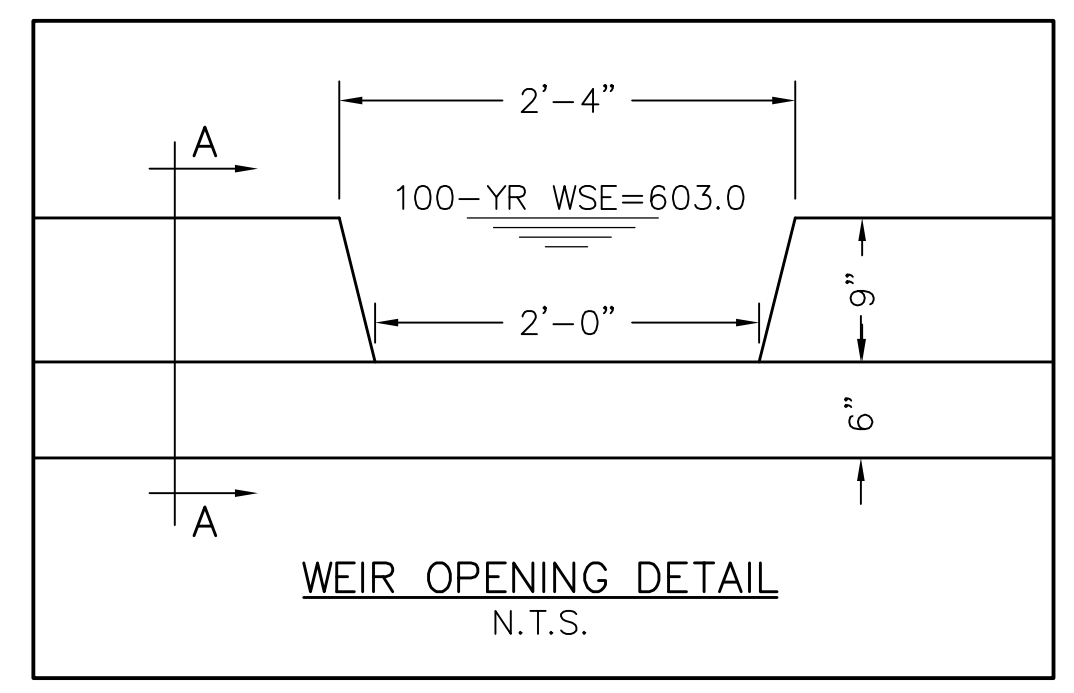
Commercial Group LLC
Volume 5646, Page 100

LEGEND

- 6" REINF. CONC. PAVEMENT (6.5 SACK-3600 psi) W/ #3 BARS @ 18" O.C.E.W. OVER 6" SUBGRADE, SCARIFIED AND COMPACTED TO 95% STD. PROCTOR DENSITY (ASTM-D698). W/ +2% to +4% OPTIMUM MOISTURE CONTENT. (NO SAND CUSHION UNDER PROPOSED PAVEMENT)
- 7" REINF. CONC. PAVEMENT (6.5 SACK-3600 psi) W/ #3 BARS @ 18" O.C.E.W. OVER 6" SUBGRADE, SCARIFIED AND COMPACTED TO 95% STD. PROCTOR DENSITY (ASTM-D698). W/ +2% to +4% OPTIMUM MOISTURE CONTENT. (NO SAND CUSHION UNDER PROPOSED DUMPSTER PAD)
- 4" REINF. CONC. PAVEMENT (6.5 SACK-3600 psi) W/ #3 BARS @ 18" O.C.E.W. OVER 6" SUBGRADE, SCARIFIED AND COMPACTED TO 95% STD. PROCTOR DENSITY (ASTM-D698). W/ +2% to +4% OPTIMUM MOISTURE CONTENT. (NO SAND CUSHION UNDER PROPOSED SIDEWALK)
- SJ SAWED CONTRACTION JOINT
- EJ EXPANSION JOINT

PAVING NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE CITY'S STANDARDS AND SPECIFICATIONS AND NCTCOG 3RD EDITION.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC. MUST BE ADJUSTED TO PROPER LINE AND GRADE BY THE CONTRACTOR PRIOR TO AND AFTER THE PLACING OF PERMANENT PAVING. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING CONSTRUCTION OF THIS PROJECT.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL THE APPROPRIATE UTILITY COMPANIES FOR THE LOCATION OF ALL UTILITIES WITHIN THE CONSTRUCTION AREA. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 48 HRS PRIOR TO ANY EXCAVATIONS. DIG TESS (1-800-545-6005)
4. THE PAVING CONTRACTOR SHALL COORDINATE WITH THE UTILITY CONTRACTOR TO INSURE ALL CONDUIT FOR IRRIGATION HAS BEEN INSTALLED PRIOR TO PLACEMENT OF PERMANENT PAVEMENT.
5. ALL EARTHWORK OPERATIONS, PAVEMENT AND BUILDING SUBGRADE PREPARATION SHALL COMPLY WITH ALL RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL REPORT, PROVIDED BY OTHERS.
6. TRAFFIC BARRICADES WILL BE REQUIRED FOR PAVING AND UTILITY CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY. BARRICADES SHALL CONFORM TO THE INSTALLATION SHOWN IN THE LATEST TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AS CURRENTLY AMENDED BY THE TEXAS DEPARTMENT OF TRANSPORTATION. CONTACT CITY TRANSPORTATION DEPARTMENT PRIOR TO SETTING BARRICADES IN THE RIGHT OF WAY.
7. ALL DRIVE AREAS AND ISLANDS SHALL HAVE 6" CONCRETE CURB, UNLESS OTHERWISE NOTED ON PLANS.
8. CONCRETE PAVING SHALL HAVE A CONSTRUCTION JOINT OR SAWED CONTROL JOINT EVERY 15 FEET TRANSVERSELY AND LONGITUDINALLY WITH EXPANSION JOINTS AS SHOWN IN THE DRAWINGS. JOINTS SHALL INTERSECT ALL PAVEMENT EDGES AT 90° INCLUDING RADIUS RETURNS. EXPANSION JOINTS SHALL BE PLACED AT A MAXIMUM SPACING OF 100' CENTER TO CENTER. ALL JOINTS SHALL BE SEALED WITH HOT POURED RUBBER JOINT SEALING COMPOUND.
9. CONTRACTOR SHALL INSTALL ALL CONDUITS PRIOR TO THE PLACEMENT OF PAVEMENT. ALL SLEEVES SHOWN ON PLANS SHALL BE SCHEDULED 40 PVC WITH PULLED WIRES & CAPPED. REFER TO LANDSCAPE & MECHANICAL PLANS FOR LOCATIONS AND SIZE OF CONDUITS.
10. FIRE LANE PAVEMENT MARKINGS SHALL BE PAINTED LINES OF RED TRAFFIC PAINT, 6" WIDE, TO SHOW THE EXACT BOUNDARY LINES OF THE FIRE LANE. THESE BOUNDARY LINES MAY BE ON THE CURB OR FLAT PAVEMENT. THE LINES SHALL BE MARKED BY PAINTED 4" HIGH LETTERING USING A 1" WIDE STROKE OF WHITE TRAFFIC PAINT ON THE CONTRASTING RED BACKGROUND STATING "NO PARKING - FIRE LANE". THIS MARKING SHALL BE PLACED AT 25' INTERVALS ALONG EACH BOUNDARY LINE -SEE DIMENSIONAL CONTROL PLAN FOR DETAILS AND LOCATION.



AS-BUILT PLANS

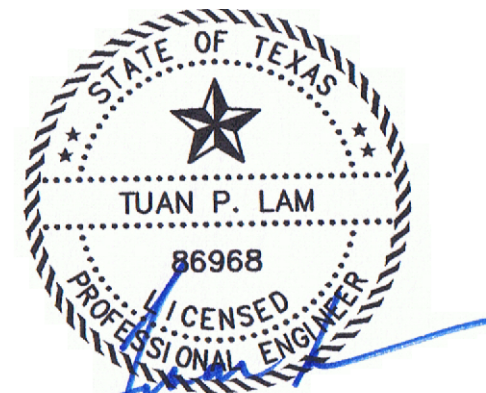
TO THE BEST OF OUR KNOWLEDGE LAM CONSULTING ENGINEERING, HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON THE OWNER SURVEYOR SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR. 8/17/16

CONTRACTOR SHALL PAY ALL PERMIT FEES AND WILL SETUP PRE-CONSTRUCTION MEETING PRIOR TO COMMENCING ANY WORK.

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

SURVEY INFORMATION ON THIS DRAWING WAS PROVIDED BY OTHERS. LAM CONSULTING ENGINEERING IS NOT RESPONSIBLE FOR THE ACCURACY OF THE TOPOGRAPHIC MAPPING NOR BENCHMARK DATUM.

THE INFORMATION SHOWN ON THIS PLAN ARE FROM RECORD DRAWINGS. THE ENGINEER IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION SHOWN ON THIS DRAWING. CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES AND CONTACT ALL UTILITY COMPANIES 48 HRS PRIOR TO ANY EXCAVATION. 1-800-DIG TESS



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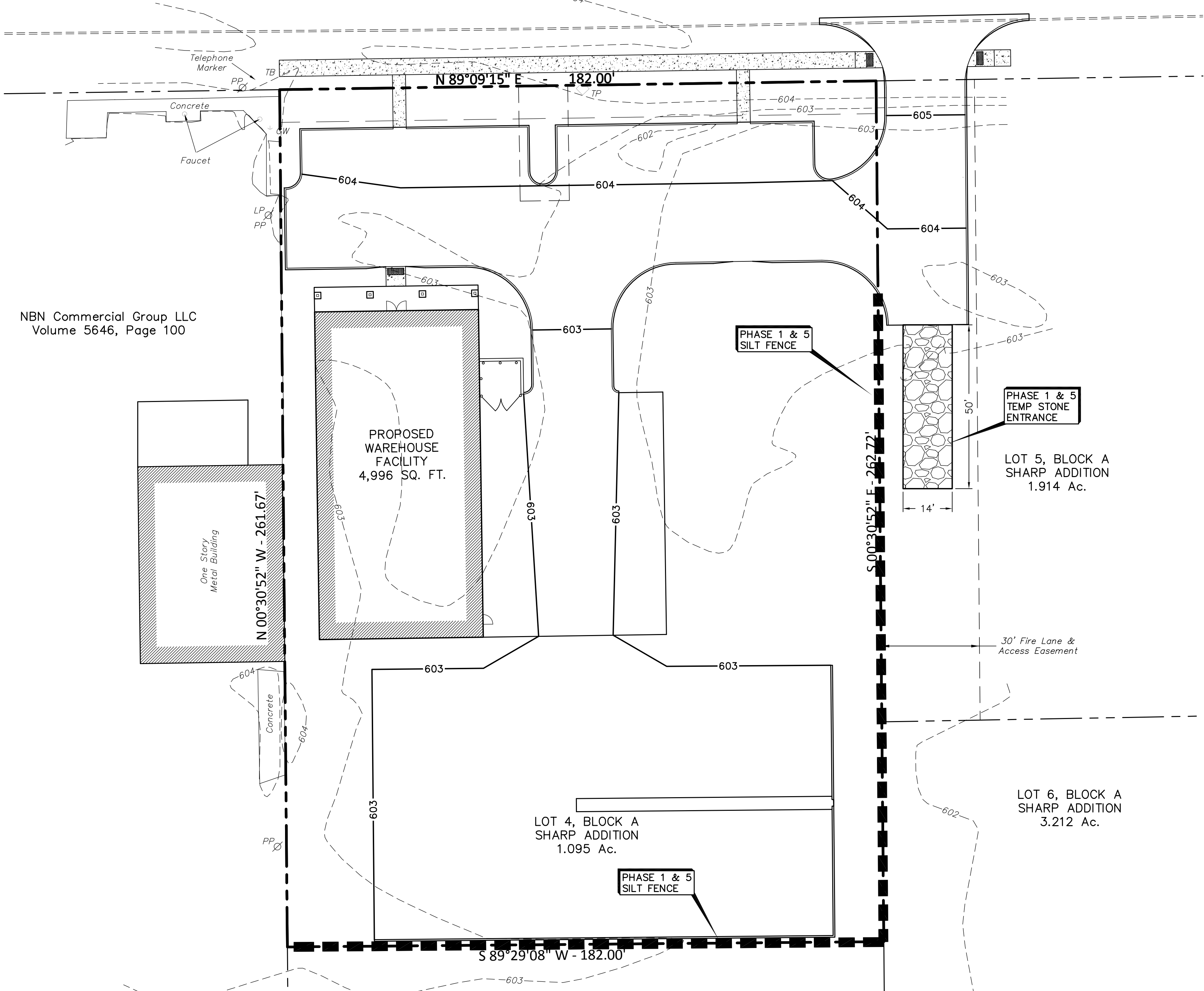
PAVING PLAN

**SHARP ADDITION, LOT 4, BLOCK A
SHARP WAREHOUSE
3255 SPRINGER ROAD
ROCKWALL, TEXAS 75032**

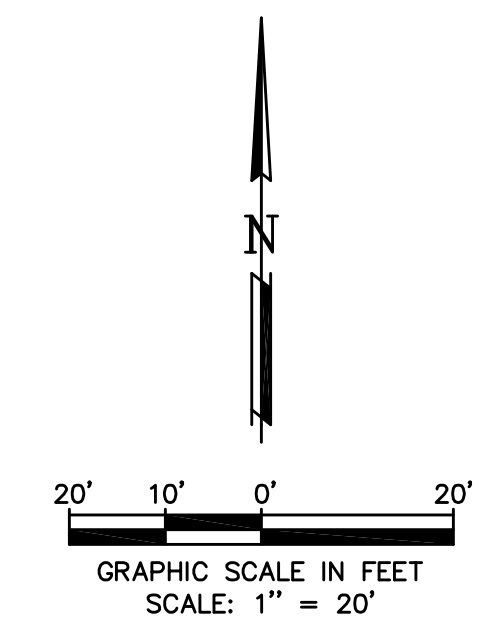
LAM CONSULTING ENGINEERING
6804 WILHELMINA DRIVE
SACHSE, TEXAS 75048
Phone (214) 765-1011
www.lamcivil.com
Firm #F-9763

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| DESIGN: LCE | CHECK: LCE | SCALE: AS NOTED | 6 of 7 |
| DRAWN: CTL | DATE: SEPTEMBER 2014 | PROJECT: 0500-14 | |

SPRINGER ROAD
(80' Right-of-Way)



NBN Commercial Group LLC
Volume 5646, Page 100



- LEGEND**
- SILT FENCE
 - 12" THICK 14'X50' TEMP. STONE ENTRANCE (4"-8" DIA. COARSE AGGREGATE)

- CONSTRUCTION SCHEDULE & PHASING**
- PHASE 1: INSTALL SILT FENCE AND STONE CONSTRUCTION ENTRANCE FOR ROUGH GRADING.
 - PHASE 2: INSTALL UTILITIES
 - PHASE 3: PAVE PARKING LOT AND DRIVEWAY.
 - PHASE 4: CONSTRUCT BUILDING FOUNDATION.
 - PHASE 5: ESTABLISH GROUND COVER AND REMOVE EROSION CONTROL DEVICES

- GENERAL NOTES:**
1. EROSION CONTROL DEVICES AS SHOWN ON THE EROSION CONTROL PLAN FOR THE PROJECT SHALL BE INSTALLED PRIOR TO THE START OF LAND DISTURBING ACTIVITIES ON THE PROJECT.
 2. ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS FOR THE PROJECT. CHANGES ARE TO BE APPROVED BEFORE CONSTRUCTION BY THE DESIGN ENGINEER AND THE CITY ENGINEERING DIVISION.
 3. IF THE EROSION CONTROL PLAN AS APPROVED CANNOT CONTROL EROSION AND OFF-SITE SEDIMENTATION FROM THE PROJECT THE EROSION CONTROL PLAN WILL BE REVISED AND/OR ADDITIONAL EROSION CONTROL DEVICES WILL BE REQUIRED ON SITE.
 4. IF OFF-SITE SOIL BORROW OR SPOIL SITES ARE USED IN CONJUNCTION WITH THIS PROJECT, THIS INFORMATION SHALL BE DISCLOSED AND SHOWN ON THE EROSION CONTROL PLAN. OFF-SITE BORROW AND SPOIL AREAS ARE CONSIDERED A PART OF THE PROJECT SITE AND THEREFORE SHALL COMPLY WITH THE CITY'S EROSION CONTROL REQUIREMENTS. THESE AREAS SHALL BE STABILIZED WITH PERMANENT GROUND COVER PRIOR TO FINAL APPROVAL OF THE PROJECT.
 5. EROSION CONTROL MEASURES SHALL BE INSPECTED AND REPAIRED, IF NECESSARY, AT THE EARLIEST POSSIBLE DATE BUT NO LATER THAN SEVEN (7) CALENDAR DAYS AFTER EACH RAIN. ANY ITEM DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED.
 6. THE CONTRACTOR IS RESPONSIBLE FOR MONITORING DOWNSTREAM CONDITIONS THROUGHOUT THE CONSTRUCTION PERIOD AND WILL CLEAN ANY DEBRIS AND SEDIMENT CAUSED BY CONSTRUCTION
 7. THE CONTRACTOR SHALL PREVENT EROSION OF THE SITE AND PROTECT ALL DRAINAGE STRUCTURES BY THE USE OF SILT FENCING OR OTHER APPROVED EROSION CONTROL PRODUCTS AS NEEDED. TEMPORARY EROSION CONTROL DEVICES INSTALLED BY THE CONTRACTOR ON THIS PROJECT SHALL ALSO BE REMOVED BY THE CONTRACTOR AT THE APPROPRIATE TIME AS INCIDENTAL TO THE RESPECTIVE EROSION CONTROL DEVICE ITEM.
 8. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY THE PROJECT ENGINEER DURING ON-SITE INSPECTIONS.
 9. WETLANDS ARE NOT PRESENT ON-SITE NOR ADJACENT TO THIS PROJECT.
 10. ALL POLLUTION PREVENTION CONTROL DEVICES SHALL CONFORM TO THE CITY'S EROSION AND SEDIMENT CONTROL MANUAL.
 11. IF THE EROSION CONTROL PLAN AS APPROVED CANNOT CONTROL EROSION AND OFF-SITE SEDIMENTATION FROM THE PROJECT THE EROSION CONTROL PLAN WILL BE REVISED AND/OR ADDITIONAL EROSION CONTROL DEVICES WILL BE REQUIRED ON SITE.
 12. CONTRACTOR SHALL ADD OR REMOVE EROSION CONTROL DEVICES AS NEEDED DURING THE CONSTRUCTION PHASES.

AS-BUILT PLANS
TO THE BEST OF OUR KNOWLEDGE LAM CONSULTING ENGINEERING, HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON THE OWNER SURVEYOR SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.
8/17/16

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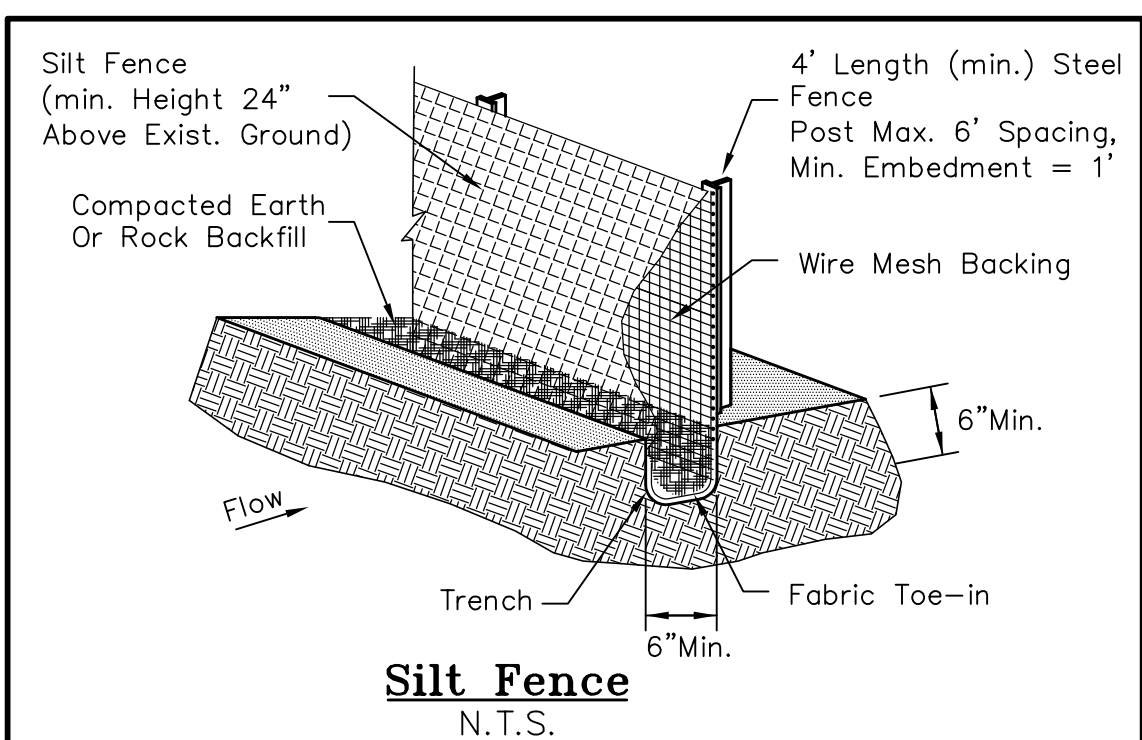
SHARP INSULATION CO.
959 W. RALPH HALL PARKWAY
ROCKWALL, TEXAS 75032
(972) 772-7411



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NOTE:
CONTRACTOR SHALL PROVIDE CONSTRUCTION SITE NOTICE TO THE CITY PRIOR TO START OF CONSTRUCTION.

LOT AREA = 47,698 Sq. Ft.
DISTURBED AREA = 45,313 Sq. Ft.



CONTRACTOR SHALL PAY ALL PERMIT FEES AND WILL SETUP PRE-CONSTRUCTION MEETING PRIOR TO COMMENCING ANY WORK.

SURVEY INFORMATION ON THIS DRAWING WAS PROVIDED BY OTHERS. LAM CONSULTING ENGINEERING IS NOT RESPONSIBLE FOR THE ACCURACY OF THE TOPOGRAPHIC MAPPING NOR BENCHMARK DATUM.

THE INFORMATION SHOWN ON THIS PLAN ARE FROM RECORD DRAWINGS. THE ENGINEER IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION SHOWN ON THIS DRAWING. CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES AND CONTACT ALL UTILITY COMPANIES 48 HRS PRIOR TO ANY EXCAVATION. 1-800-DIG TESS

B.M.P. MAINT. SCHED.

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EROSION CONTROL PLAN

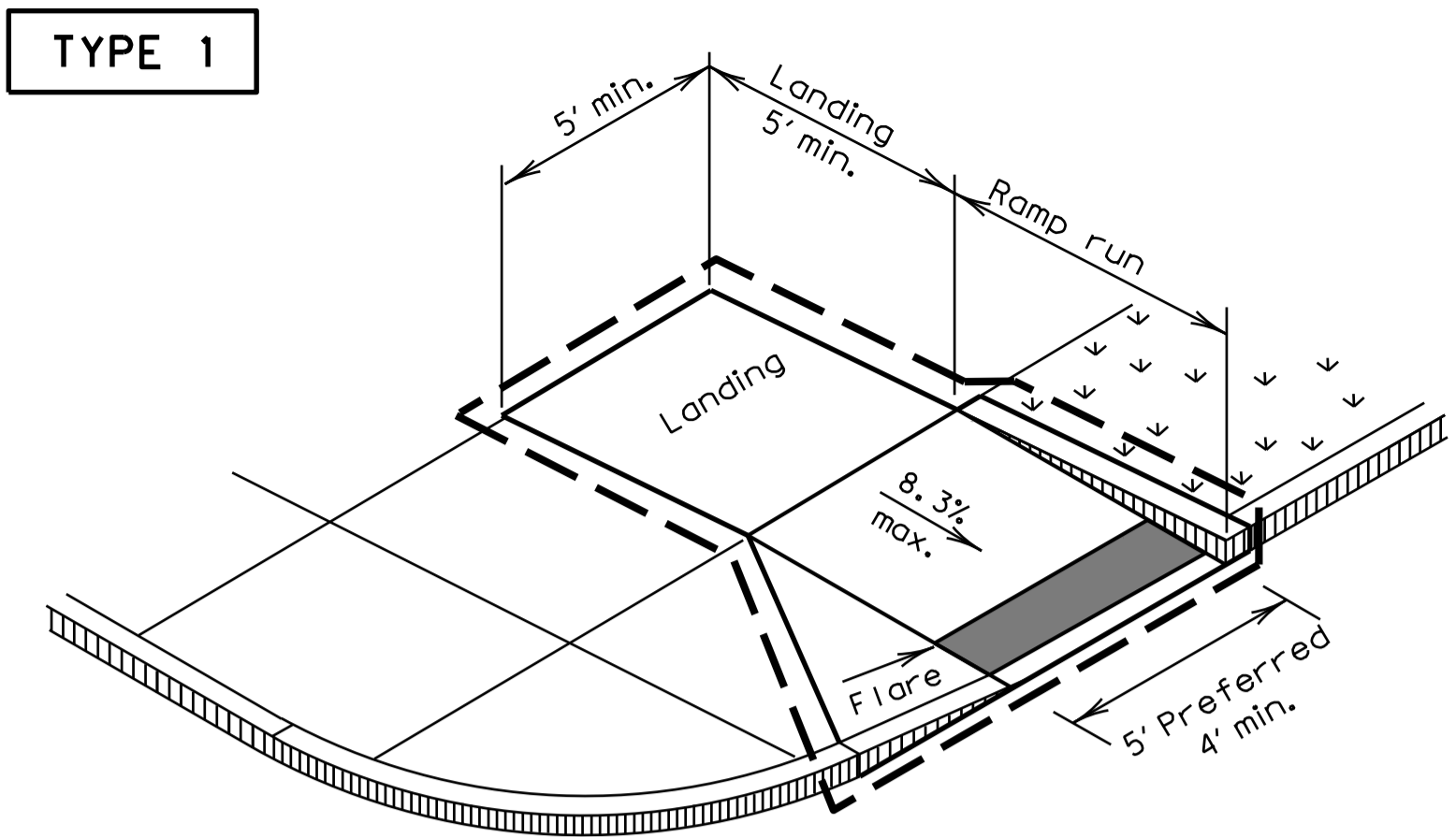
SHARP ADDITION, LOT 4, BLOCK A
SHARP WAREHOUSE
3255 SPRINGER ROAD
ROCKWALL, TEXAS 75032

LAM CONSULTING ENGINEERING
6804 WILHELMINA DRIVE
SACHSE, TEXAS 75048
Phone (214) 766-1011
www.lamcivil.com
Firm #F-9763

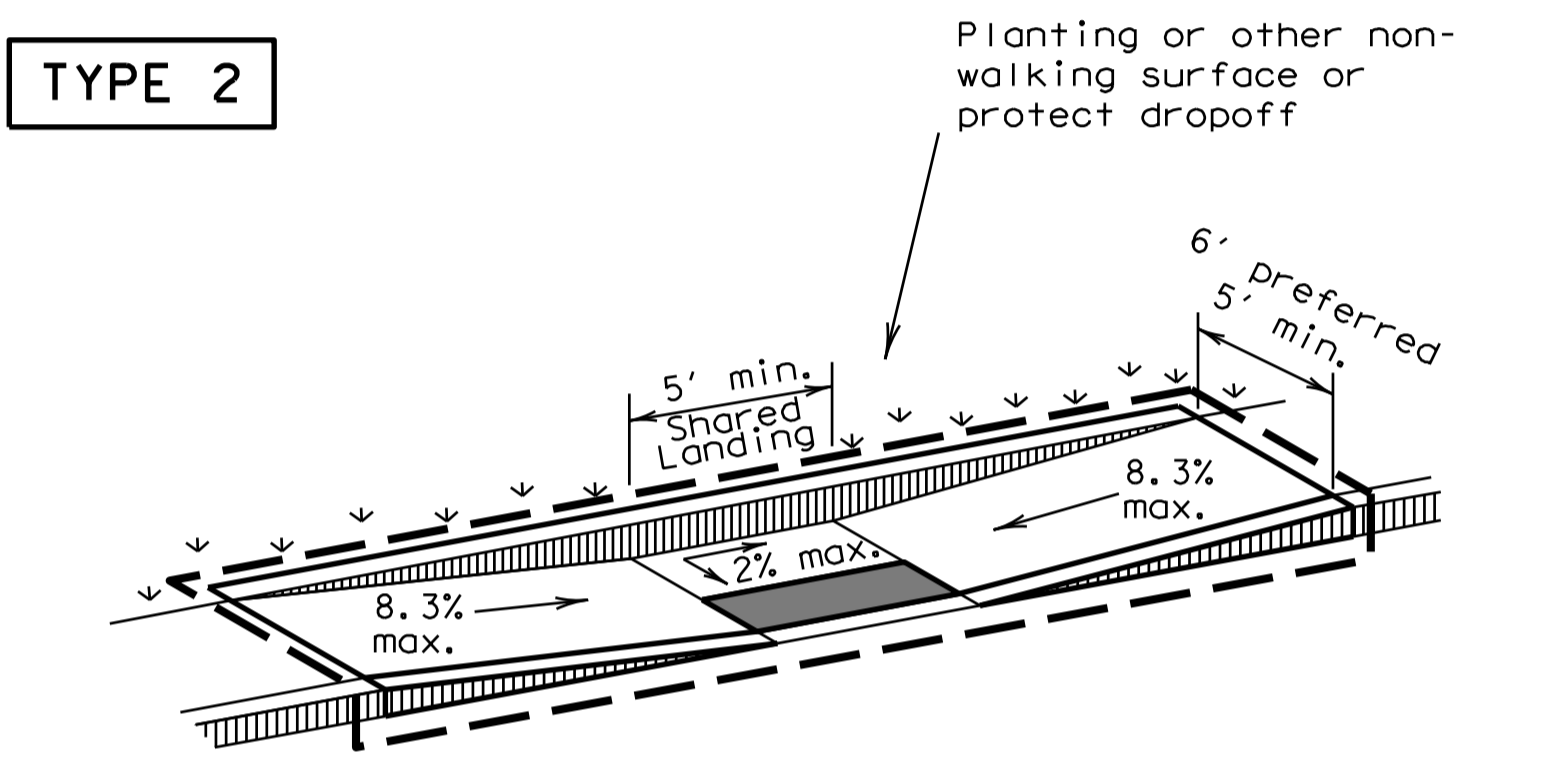
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| DESIGN: LCE | CHECK: LCE | SCALE: AS NOTED | 7 of 7 |
| DRAWN: CTL | DATE: SEPTEMBER 2014 | PROJECT: 0500-14 | |

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DATE: FILE:

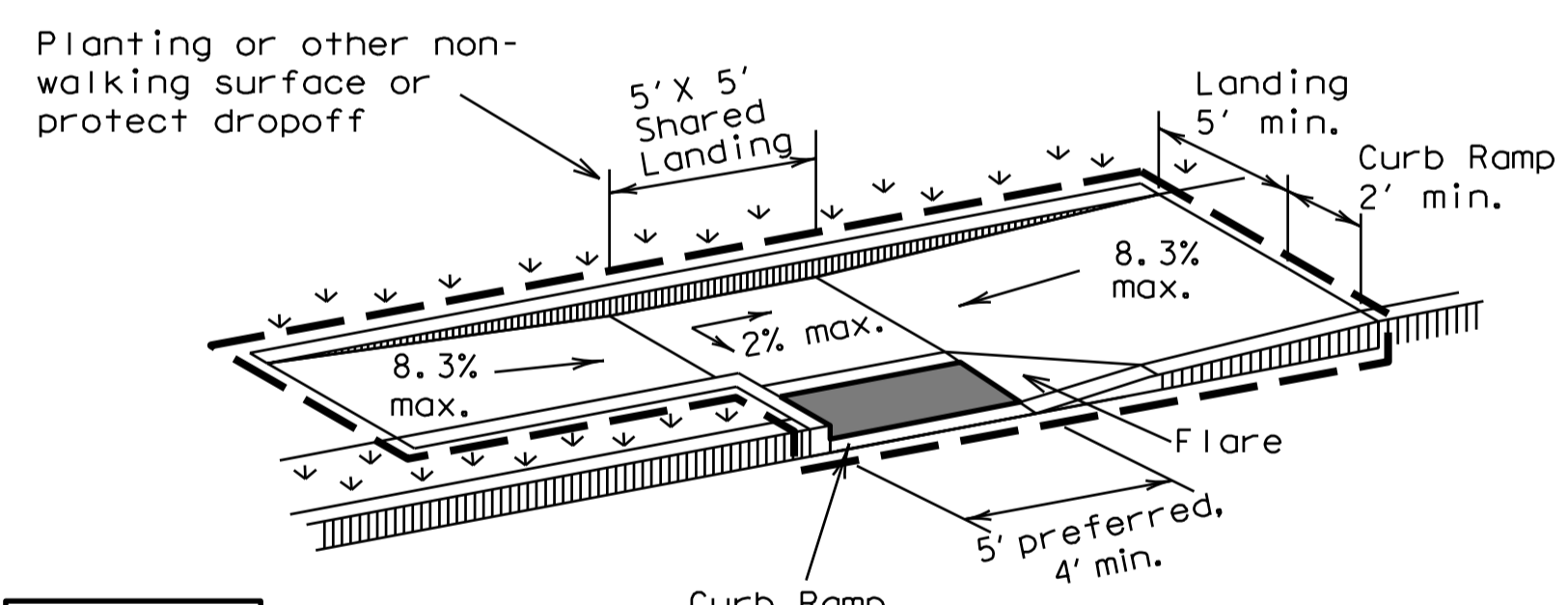


PERPENDICULAR CURB RAMP

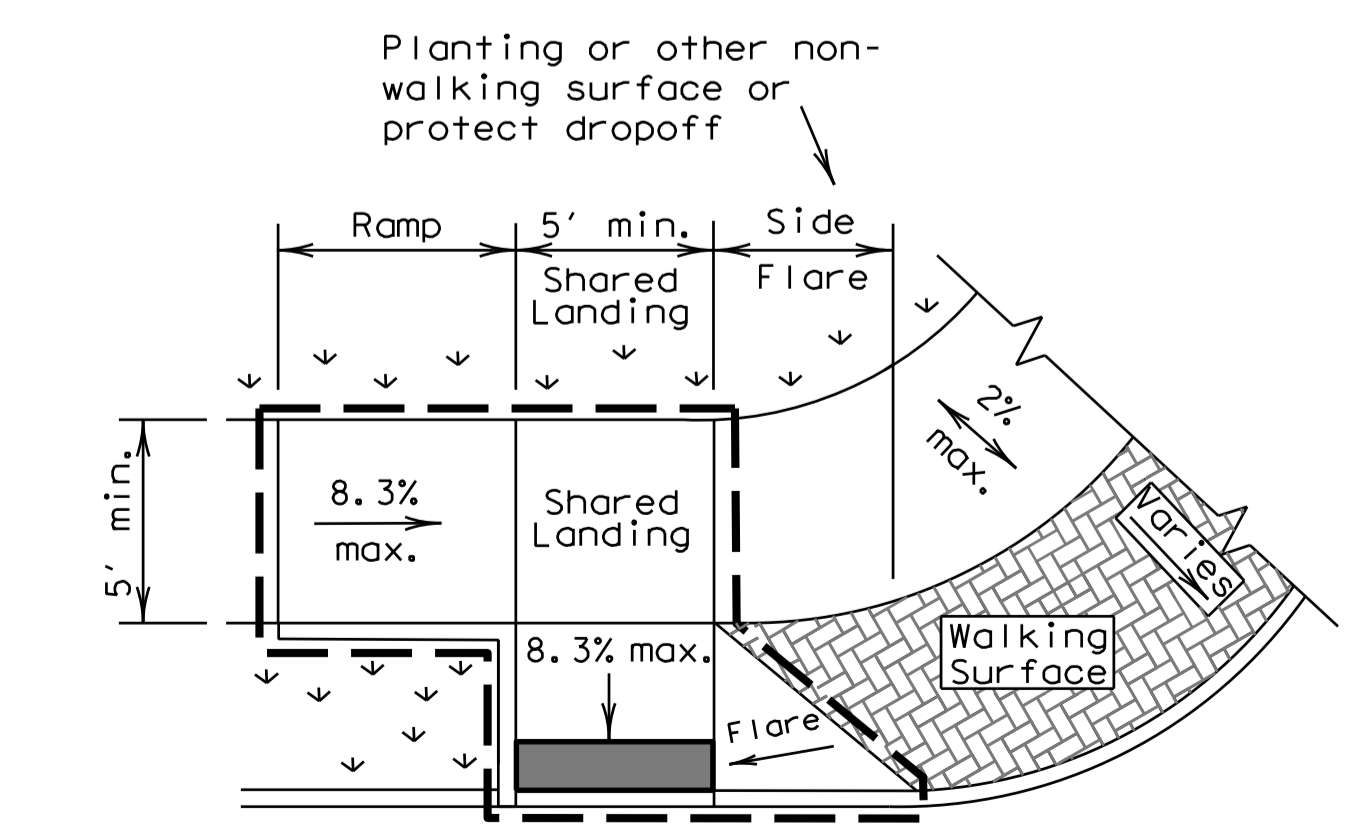


PARALLEL CURB RAMP

(Use only where water will not pond in the landing.)

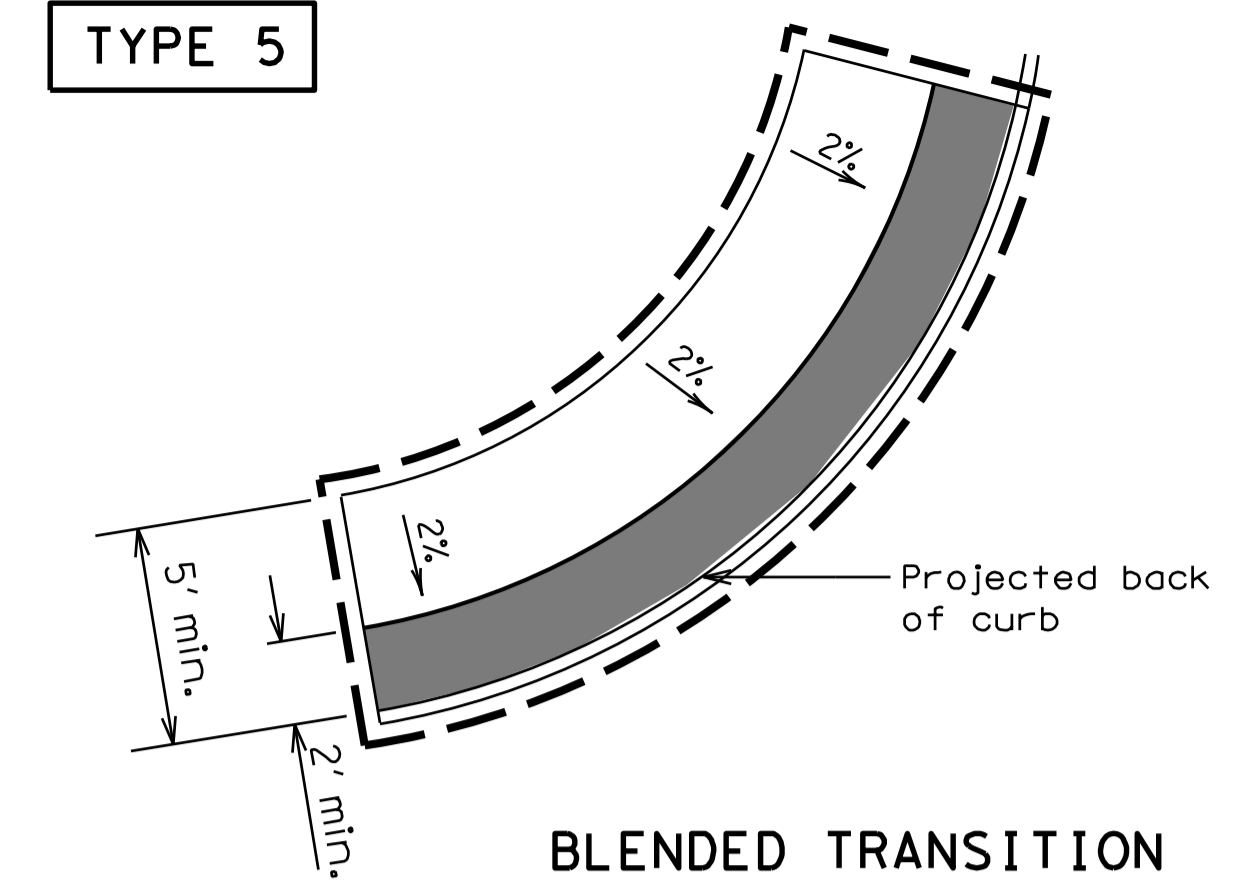


TYPE 3

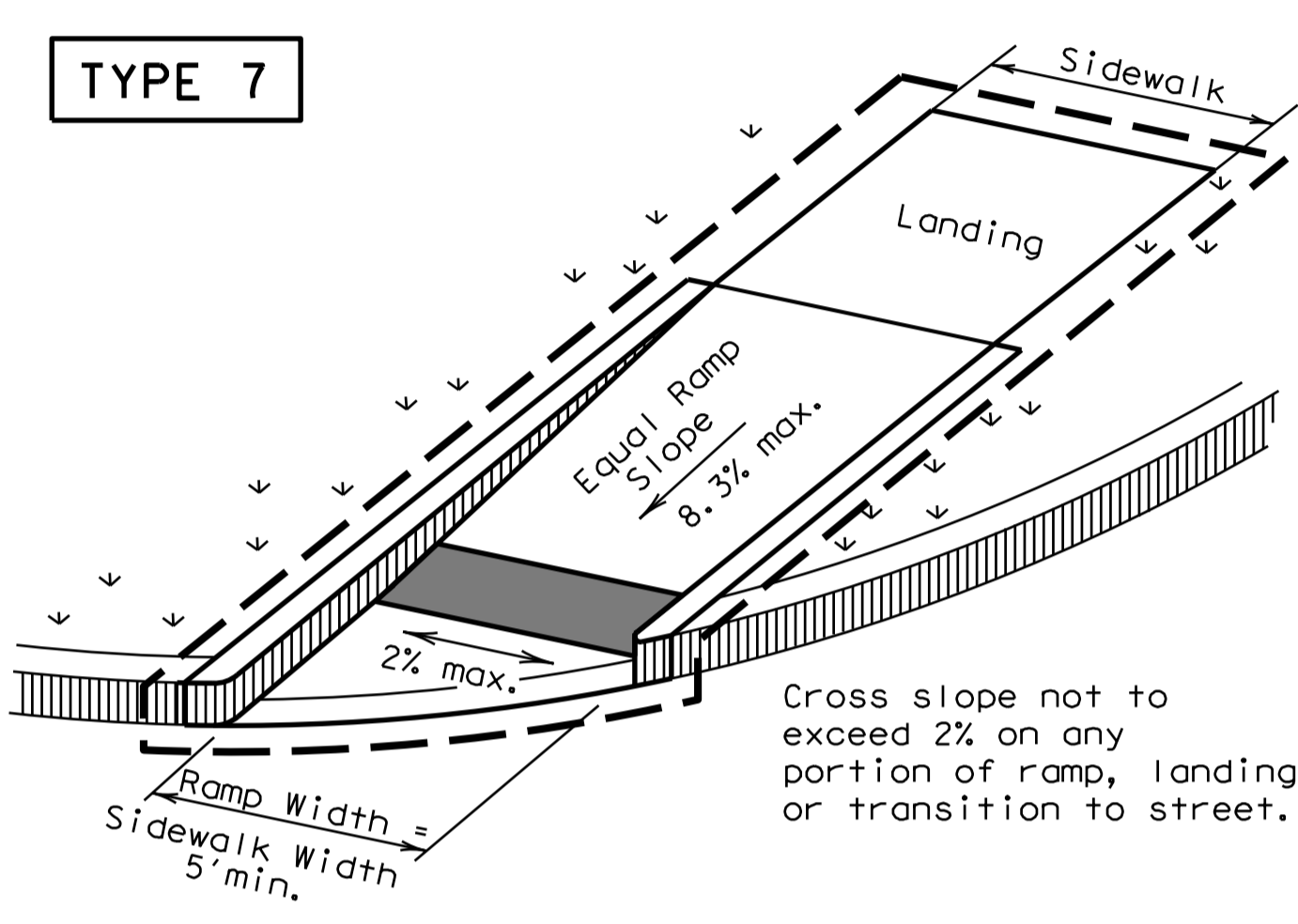


TYPE 6

COMBINATION CURB RAMPS

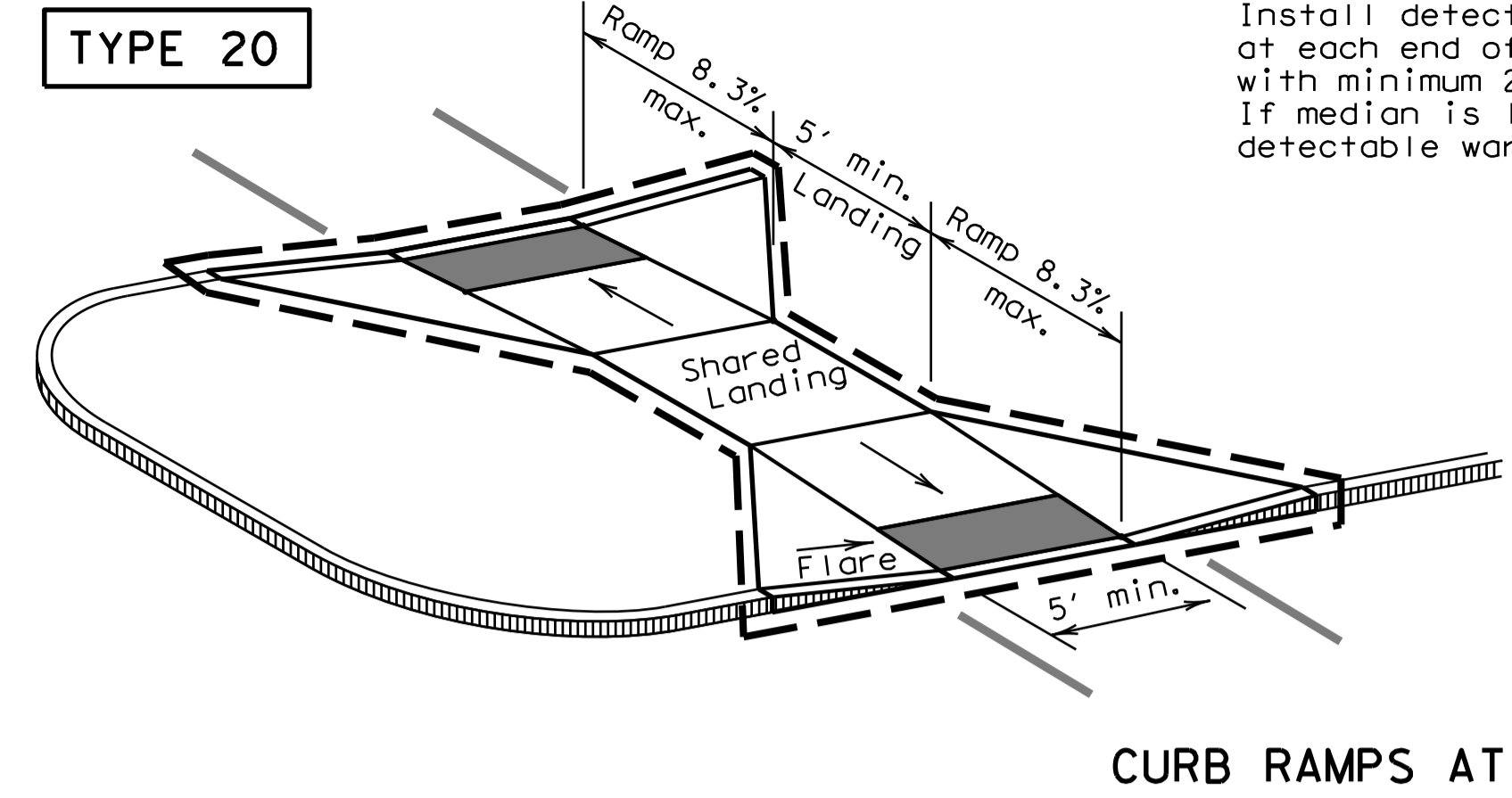


BLENDED TRANSITION

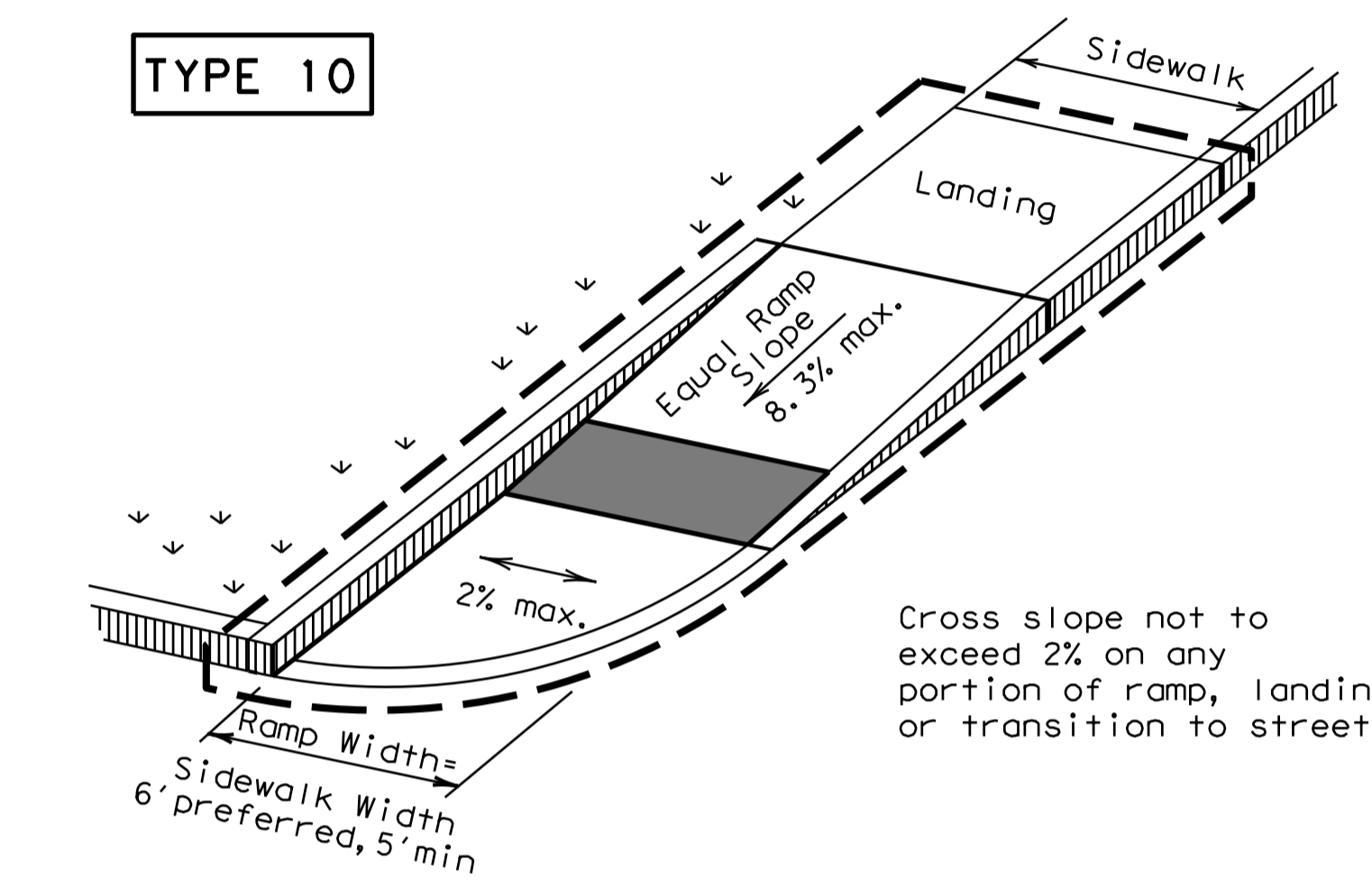


(Sidewalk set back from curb)

DIRECTIONAL RAMPS WITHIN RADIUS

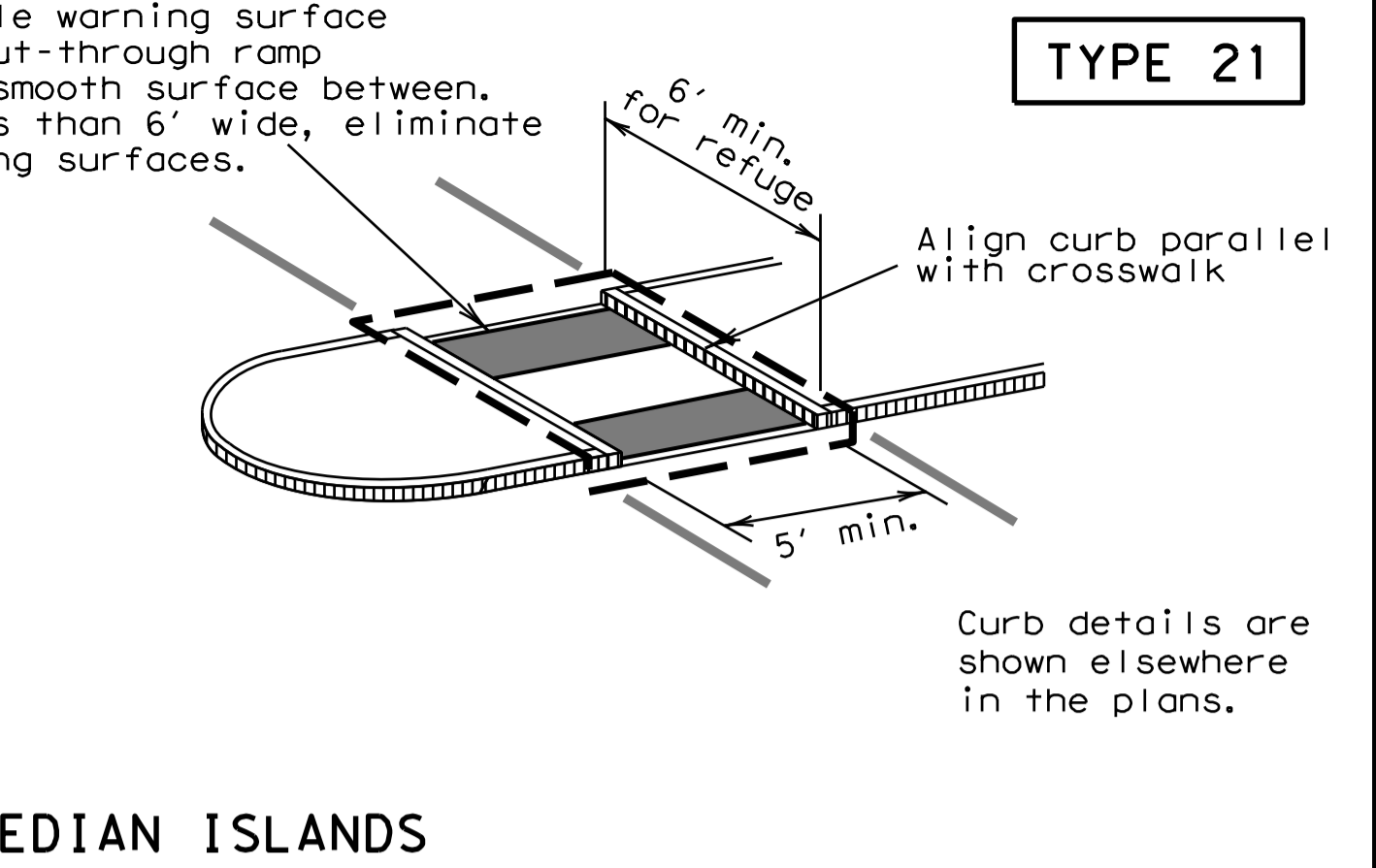


CURB RAMPS AT MEDIAN ISLANDS



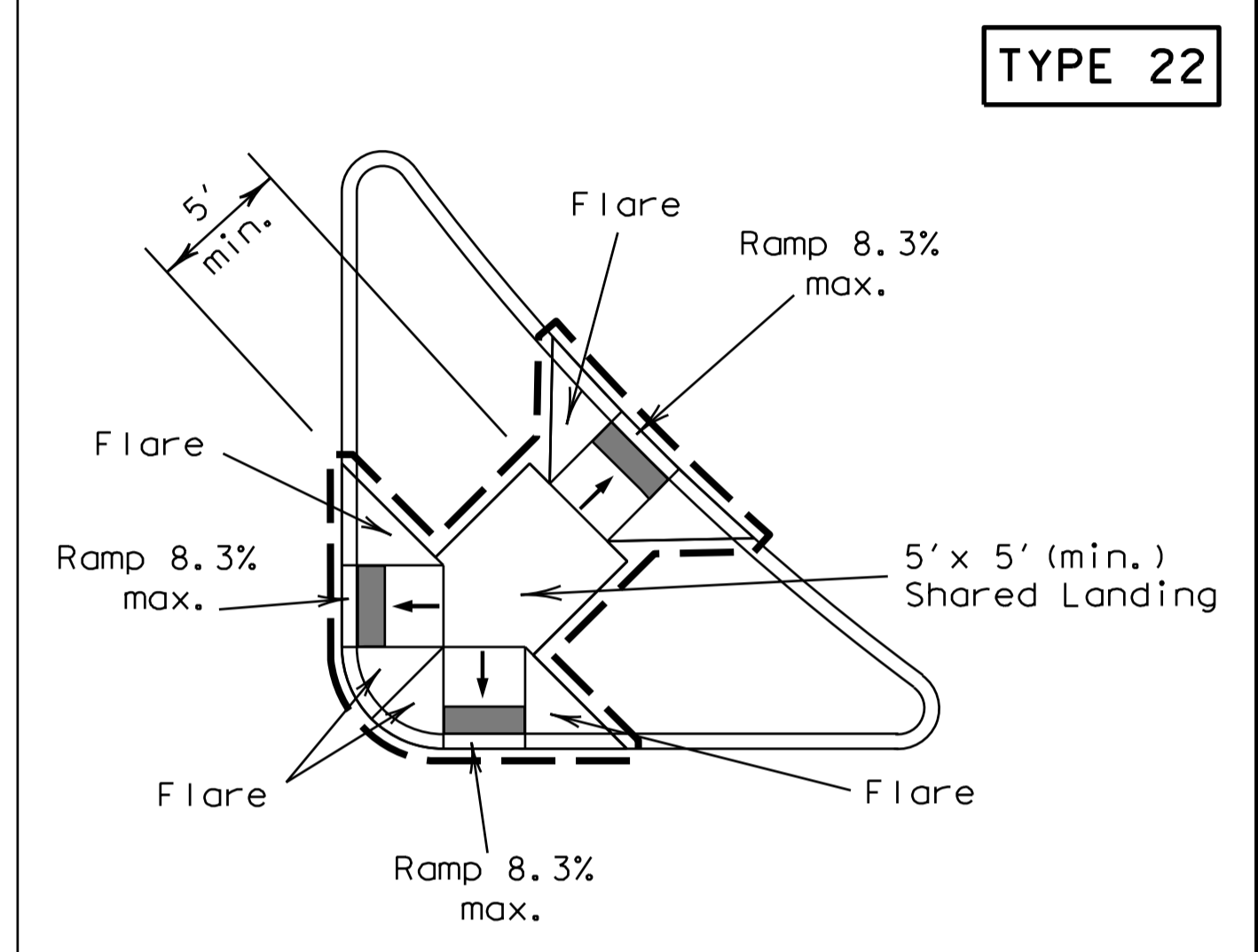
(Sidewalk adjacent to curb)

Cross slope not to exceed 2% on any portion of ramp, landing or transition to street.



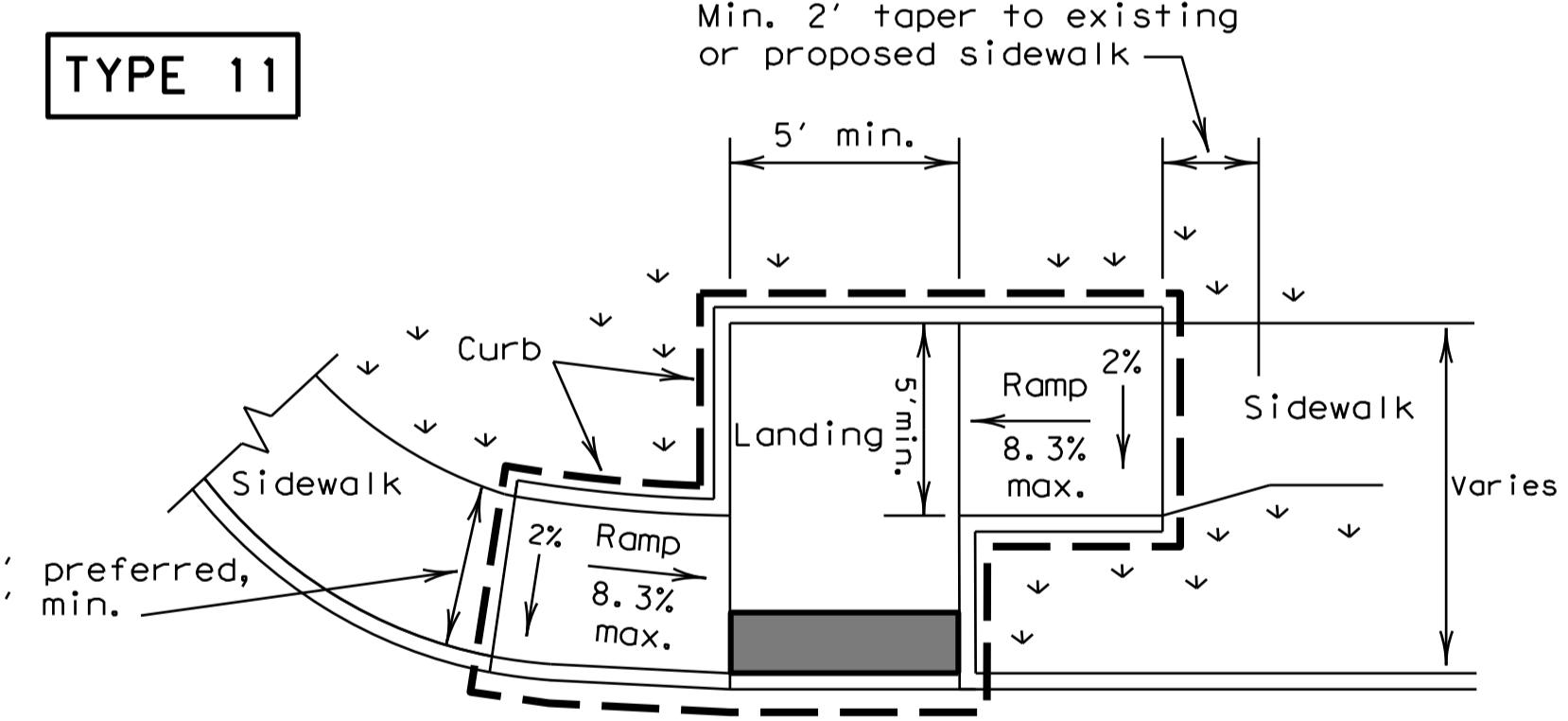
TYPE 21

Curb details are shown elsewhere in the plans.



TYPE 22

COMBINATION ISLAND RAMPS



OFFSET PARALLEL CURB RAMP

NOTES / LEGEND:

See General Notes on sheet 2 of 4 for more information.

Denotes planting or non-walking surface not part of pedestrian circulation path.

--- Ramp Limits of Payment

■ Detectable Warning Surface

PEDESTRIAN FACILITIES
CURB RAMPS

PED-12A

| | | | | |
|--------------------|-----------|--------|-----------|-----------|
| FILE: ped12A.dgn | DN: TxDOT | CK: PK | DW: TxDOT | CK: HD |
| © TxDOT March 2002 | CONT | SECT | JOB | HIGHWAY |
| REVISIONS | | | | |
| VP June 13, 2012 | DIST | COUNTY | | SHEET NO. |

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DATE: FILE:

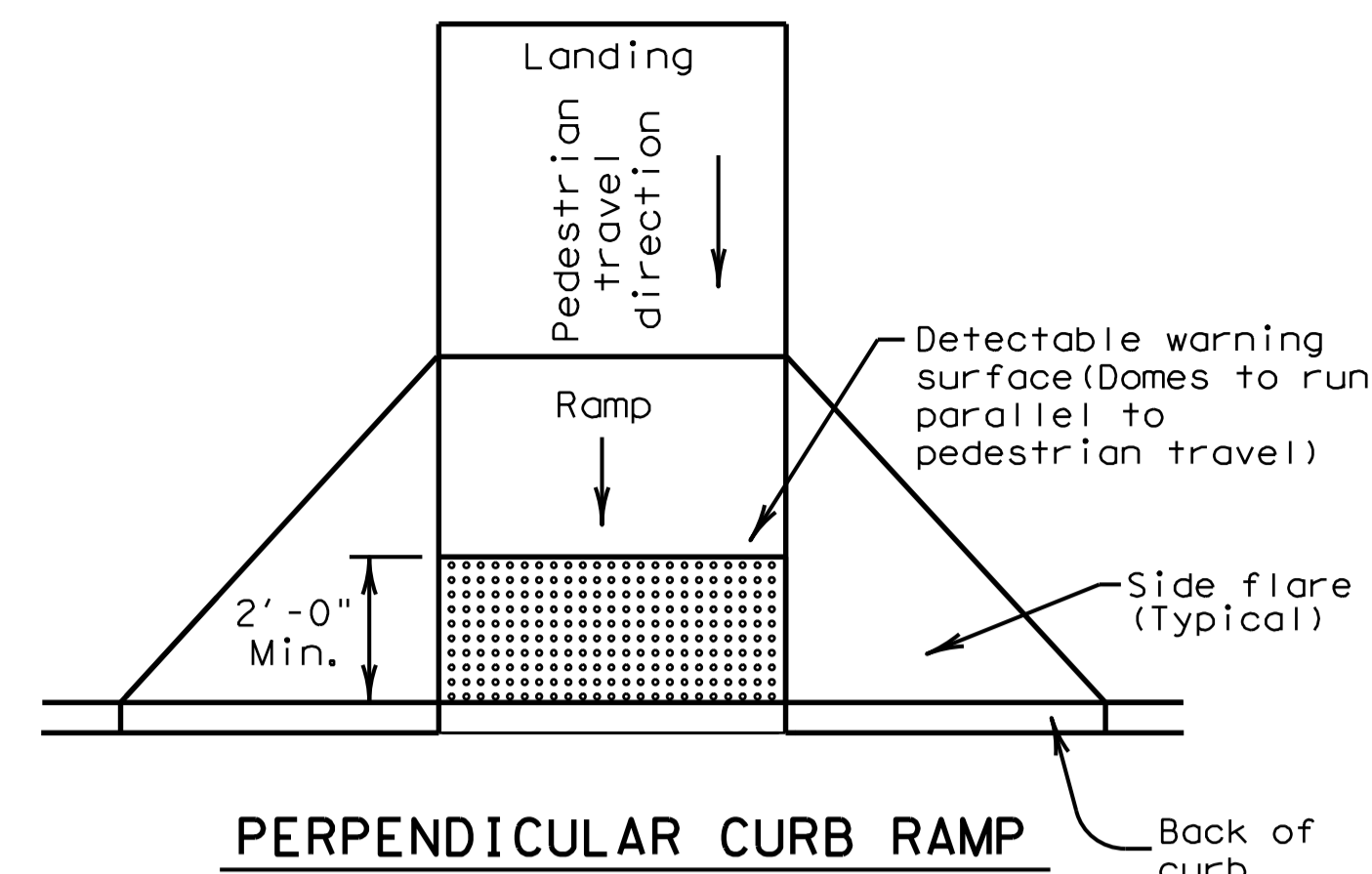
General Notes

Curb Ramps

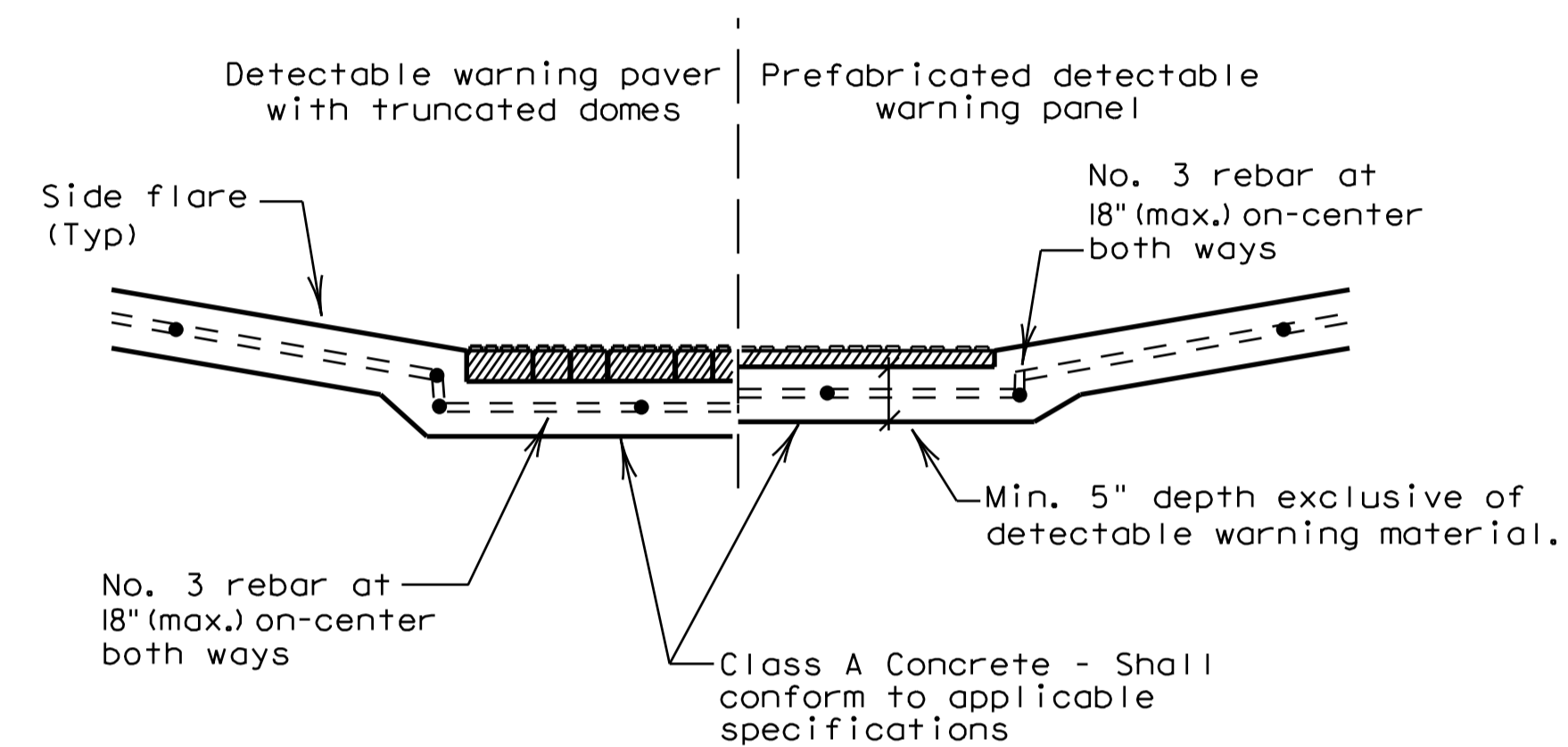
1. Install a curb ramp or blended transition at each pedestrian street crossing.
2. All slopes shown are maximum allowable. Lesser slopes that will still drain properly should be used. Adjust curb ramp length or grade of approach sidewalks as directed.
3. The minimum sidewalk width is 5'. Where the sidewalk is adjacent to the back of curb, a 6' sidewalk width is desirable. Where a 5' sidewalk cannot be provided due to site constraints, sidewalk width may be reduced to 4' for short distances. 5' x 5' passing areas at intervals not to exceed 200' are required.
4. Landings shall be 5' x 5' minimum with a maximum 2% slope in any direction.
5. Maneuvering space at the bottom of curb ramps shall be a minimum of 4' x 4' wholly contained within the crosswalk and wholly outside the parallel vehicular travel path.
6. Maximum allowable cross slope on sidewalk and curb ramp surfaces is 2%.
7. Provide flared sides where the pedestrian circulation path crosses the curb ramp. Flared sides shall be sloped at 10% maximum, measured parallel to the curb. Returned curbs may be used only where pedestrians would not normally walk across the ramp, either because the adjacent surface is planted, substantially obstructed, or otherwise protected.
8. Additional information on curb ramp location, design, light reflective value and texture may be found in the current edition of the Texas Accessibility Standards (TAS) and 16 TAC 68.102.
9. To serve as a pedestrian refuge area, the median should be a minimum of 6' wide, measured from back of curbs. Medians should be designed to provide accessible passage over or through them.
10. Small channelization islands, which do not provide a minimum 5' x 5' landing at the top of curb ramps, shall be cut through level with the surface of the street.
11. Crosswalk dimensions, crosswalk markings and stop bar locations shall be as shown elsewhere in the plans. At intersections where crosswalk markings are not required, curb ramps shall align with theoretical crosswalks unless otherwise directed.
12. Handrails are not required on curb ramps. Provide curb ramps wherever an accessible route crosses (penetrates) a curb.
13. Curb ramps and landings shall be constructed and paid for in accordance with Item 531 "Sidewalks".
14. Place concrete at a minimum depth of 5" for ramps, flares and landings, unless otherwise directed.
15. Provide a smooth transition where the curb ramps connect to the street.
16. Curbs shown on sheet 1 within the limits of payment are considered part of the curb ramp for payment, whether it is concrete curb, gutter, or combined curb and gutter.
17. Existing features that comply with TAS may remain in place unless otherwise shown on the plans.

Detectable Warning Material

18. Curb ramps must contain a detectable warning surface that consists of raised truncated domes complying with Section 705 of the TAS. The surface must contrast visually with adjoining surfaces, including side flares. Furnish and install an approved cast-in-place dark brown or dark red detectable warning surface material adjacent to uncolored concrete, unless specified elsewhere in the plans.
19. Detectable Warning Materials must meet TxDOT Departmental Materials Specification DMS 4350 and be listed on the Material Producer List. Install products in accordance with manufacturer's specifications.
20. Detectable warning surfaces must be slip resistant and not allow water to accumulate.
21. Detectable warning surfaces shall be a minimum of 24" in depth in the direction of pedestrian travel, and extend the full width of the curb ramp or landing where the pedestrian access route enters the street.
22. Detectable warning surfaces shall be located so that the edge nearest the curb line is at the back of curb. Align the rows of domes to be perpendicular to the grade break between the ramp run and the street. Detectable warning surfaces may be curved along the corner radius.
23. Shaded areas on Sheet 1 of 4 indicate the approximate location for the detectable warning surface for each curb ramp type.



Typical placement of detectable warning surface on sloping ramp run.



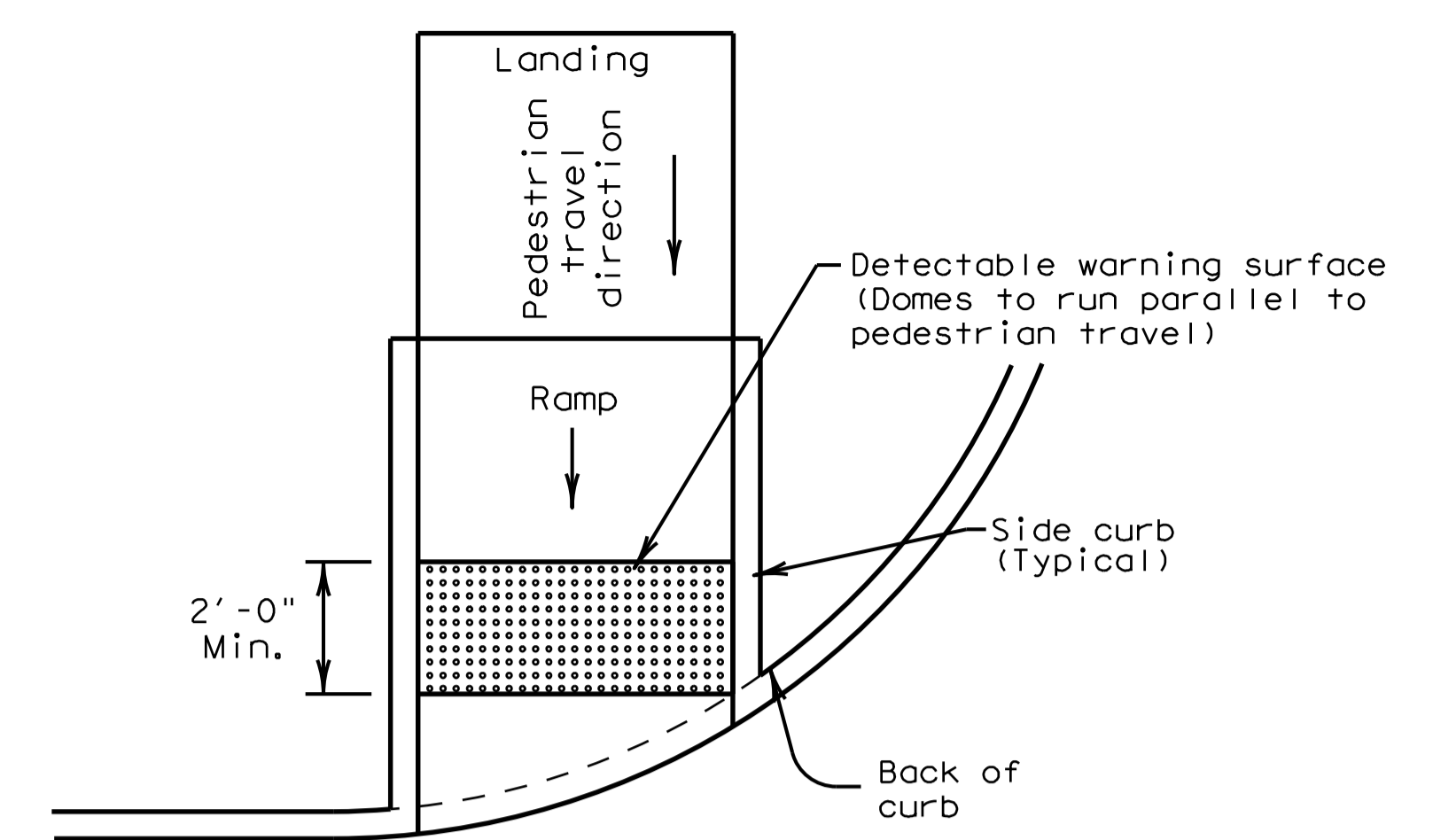
DETECTABLE WARNINGS

Detectable Warning Pavers

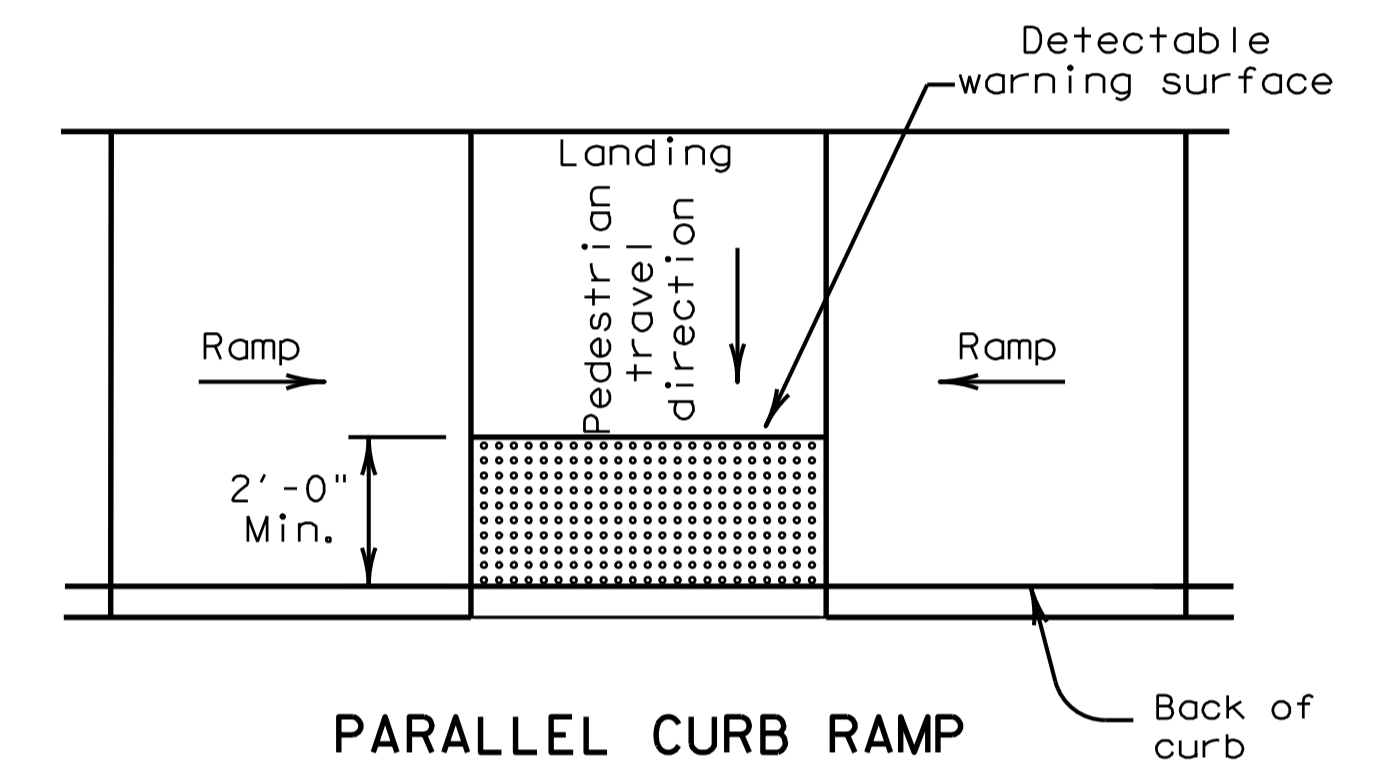
24. Furnish detectable warning paver units meeting all requirements of ASTM C-936, C-33. Lay in a two by two unit basket weave pattern or as directed.
25. Lay full-size units first followed by closure units consisting of at least 25 percent of a full unit. Cut detectable warning paver units using a power saw.

Sidewalks

26. Provide clear ground space at operable parts, including pedestrian push buttons. Operable parts shall be placed within one or more reach ranges specified in TAS 308.
27. Place traffic signal or illumination poles, ground boxes, controller boxes, signs, drainage facilities and other items so as not to obstruct the pedestrian access route or clear ground space.
28. Street grades and cross slopes shall be as shown elsewhere in the plans.
29. Changes in level greater than 1/4 inch are not permitted.
30. The least possible grade should be used to maximize accessibility. The running slope of sidewalks and crosswalks within the public right of way may follow the grade of the parallel roadway. Where a continuous grade greater than 5% must be provided, handrails may be desirable to improve accessibility. Handrails may also be needed to protect pedestrians from potentially hazardous conditions. If provided, handrails shall comply with TAS 505.
31. Handrail extensions shall not protrude into the usable landing area or into intersecting pedestrian routes.
32. Driveways and turnouts shall be constructed and paid for in accordance with Item "Intersections, Driveways and Turnouts". Sidewalks shall be constructed and paid for in accordance with Item, "Sidewalks".
33. Sidewalk details are shown elsewhere in the plans.



Typical placement of detectable warning surface on sloping ramp run.



Typical placement of detectable warning surface on landing at street edge.

SHEET 2 OF 4

Texas Department of Transportation
 Design Division Standard

PEDESTRIAN FACILITIES CURB RAMPS

PED-12A

| | | | | |
|--------------------|-----------|--------|-----------|---------|
| FILE: ped12A.dgn | DN: TxDOT | CK: PK | DW: TxDOT | CK: HD |
| © TxDOT March 2002 | CONT | SECT | JOB | HIGHWAY |
| REVISIONS | | | | |
| VP June 13, 2012 | DIST | COUNTY | SHEET NO. | |